



FirstEnergy Nuclear Operating Company

James H. Lash
Site Vice President

724-682-5234
Fax: 724-643-8069

February 2, 2007
L-07-023

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

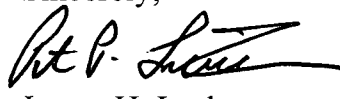
Subject: Beaver Valley Power Station, Unit No. 2
Docket No. 50-412, License No. NPF-73
Twelfth Refueling Outage Inservice Inspection Report

Enclosed please find the Inservice Inspection (ISI) Summary Report on American Society of Mechanical Engineers (ASME) Class 1, 2, 3 and CC component examinations performed prior to and during the twelfth refueling outage at Beaver Valley Power Station Unit No. 2 (BVPS-2). The ASME Boiler and Pressure Vessel Code, Section XI, Article IWA-6230 requires an inservice inspection summary report to be submitted to the enforcement and regulatory authorities having jurisdiction at the plant site within ninety days of the completion of the inservice inspection conducted during each refueling outage. The recent inservice inspection term at BVPS-2 covered the period from April 30, 2005 to November 11, 2006.

The Class 1, 2, and 3 examinations are part of Interval 2, Period 3 of the BVPS-2 ISI schedule, and were performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1989 Edition. The IWL examination was performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1992 Edition, 1992 Addenda. This was the second 5-year IWL examination performed at BVPS-2 since 10 CFR 50.55a requirements regarding IWL became effective on September 9, 1996.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Henry L. Hegrat, Supervisor, FENOC Fleet Licensing, at (330) 315-6944.

Sincerely,


for James H. Lash

Enclosure

c: Ms. N. S. Morgan, NRR Project Manager
Mr. P. C. Cataldo, Sr. Resident Inspector
Mr. S. J. Collins, NRC Region I Administrator
Mr. J. Payton, Commonwealth of Pennsylvania

A047

BEAVER VALLEY POWER STATION UNIT 2
Route 168, Shippingport, PA

Inservice Inspection Summary Report

Outage 12, Year 2006

Inspection Term: 4/30/2005 to 11/11/2006

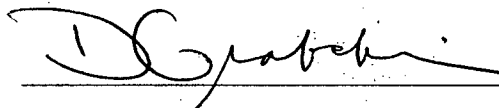
Issue date: 1-23-07

Owner: FirstEnergy
76 South Main St.
Akron, OH 44308

NRC Docket Number: 50-412

Reactor Supplier: Westinghouse Electric Corporation
Commercial Service Date: November 17, 1987

Prepared by:



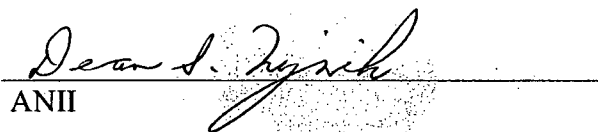
Date: 1-17-07

Reviewed by:


Supervisor, Nuclear Programs

Date: 1-17-07

Reviewed by:


ANII

Date: 1-23-07

Approved by:


Manager, Technical Services Engineering

Date: 1-23-07

90-DAY REPORT
TABLE OF CONTENTS

<u>Item</u>	<u>Page Number</u>
Cover Page	1
Table of Contents	2
Form NIS-1	3 - 4
Outage Summary	5
ASME XI Vessel, Piping and Support Examinations	
1. Class 1	5
2. Class 2	5
3. Class 3	5
Pressure Testing	6
Deficiency Resolution	6
Steam Generator Tube Examination	6
IWL Concrete Containment Examinations	6
NIS-2 Forms	6
Appendix I - Completed Code Examinations	(10 pages total)
Appendix II – Analytical Evaluations	(16 pages total)
Appendix III - Repair/Replacement Abstract and NIS-2 Forms	(92 sheets total)

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner FirstEnergy Nuclear Operating Company, Route 168, Shippingport, PA 15077
(Name and Address of Owner)

2. Plant Beaver Valley Power Station, Route 168, Shippingport, PA 15077
(Name and Address of Plant)

3. Plant Unit 2 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service Date 11/17/87 6. National Board Number for Unit N/A

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Coolant Piping	Southwest Fabricating	N/A	N/A	N/A
Auxiliary Piping	Schneider Power	N/A	N/A	N/A
2RCS-REV21	Combustion Engineering	CE-9071	160591B	21669
2RCS-P21A	Westinghouse Electric Corp	2S86P389	N/A	N/A
2RCS-P21C	Westinghouse Electric Corp	1SD035	N/A	N/A
2RCS-PRE21	Westinghouse Electric Corp	1911	485064V	W18695
2RCS-SG21A	Westinghouse Electric Corp	DMGT-1961	485065V	W-16598
2RCS-SG21B	Westinghouse Electric Corp	DMGT-1962	485066V	W-16599
2RCS-SG21C	Westinghouse Electric Corp	DMGT-1963	485067V	W-16600
2CHS-P-21A	Pacific Pumps / Dresser Ind.	49190	N/A	N/A
2RSS-P-21A	Bingham-Willamette	23049	N/A	N/A
2RSS-E21A	Joseph Oat Corp	2189-1A	485070V	890

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E0029) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07008-2300

FORM NIS-1 (Back)

8. Examination Dates 4/30/2005 to 11/11/2006
9. Inspection Period Identification: 4/30/2005 to 8/28/2008
10. Inspection Interval Identification: 11/17/1997 to 8/28/2008
11. Applicable Edition of Section XI 1989 Addenda None
12. Date/Revision of Inspection Plan: 1/2-ADM-2039, Revision 4
13. Abstract of Examination and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Appendix I (Code Exams) for examinations performed during Cycle 12 and Refueling Outage 2R12. 2R12 was the first outage in the 3rd Period of the 2nd Ten-Year Interval.
14. Abstract of Results of Examination and Tests. See text of summary report.
15. Abstract of Corrective Measures. No Corrective measures resulting from NDE ISI examinations were required in 2R12. Visual examinations of bolted connections that found evidence of boic acid leakage resulted in boric acid cleaning and re-examination.

We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A
 Date 1/17/07 Signed FirstEnergy Nuclear Operating Co. By [Signature]
 (Owner)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4/30/2005 to 11/11/2006 and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer make any warranty, expressed or implied, concerning the examinations, tests, and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB 9428 ANIB, PA 2384
 Inspector's Signature National Board, State, Province and Endorsements
 Date 01-23-07

OUTAGE SUMMARY

During the Twelfth Refueling Outage (2R12) at the Beaver Valley Power Station, Unit No. 2 (BVPS-2), Inservice Inspection (ISI) examinations were performed on Class 1, 2, 3, and CC components. This was the first outage in the third period of the 2nd Ten-Year Interval. One refueling outage remains to complete the rest of the examinations scheduled during the 2nd Ten-Year Interval. Also included in this report and the counts below, are examinations performed prior to 2R12 during plant operation. The Class 1, 2 and 3 examinations were based on ASME Section XI, 1989 Edition and the IWL exam was based on ASME XI, 1992 Edition, 1992 Addenda. This was the second 5-year IWL examination performed at BVPS-2 since the 10CFR50.55a rule regarding IWL became effective 9/9/1996.

ASME XI Class 1, 2 and 3 Credited Exams (See Appendix I)

1. One-Hundred, Ninety (190) Class 1 exams were performed and are divided as follows:

- a. Pipe Welds
 - Ultrasonic Exams - 23
 - Visual Exams - 2
- b. Vessel and Pump Welds
 - Ultrasonic Exams - 16
 - Visual Exams - 4
- c. Bolting
 - Ultrasonic Exams - 21
 - Visual Exams - 67
- d. Piping and Component Supports
 - Visual Exams - 55
 - Welded Attachments (PT) - 2

2. One-Hundred, Thirty-five (135) Class 2 exams were performed and are divided as follows:

- a. Vessel and Pump Welds
 - Ultrasonic Exams - 2
 - Penetrant Exams - 12
 - Visual Exams - 6
- b. Pipe Welds
 - Ultrasonic Exams - 14
 - Visual Exams - 29
- c. Piping and Component Supports
 - Visual Exams - 53
 - Welded Attachments (PT) - 19

3. Fifty-seven (57) Class 3 exams were performed and are divided as follows:

- a. Supports (VT-3) - 35
- b. Welded Attachments (VT-1) - 22

4. The visual examination of the BV2 concrete containment was completed during this inspection term.

Examinations were performed by FirstEnergy Nuclear Operating Company (FENOC) and contracted NDE Technicians. Appendix I compiles the examinations that have been credited toward fulfilling the Ten Year Plan requirements.

Pressure Testing

The Class 1 piping System Leakage Test was performed prior to plant start-up. All Class 1 and 2 bolted connections subject to the examination requirements of IWA-5242, "Insulated Components" and Code Case N-533-1, "Alternate requirements for VT-2 Visual Examination of Class 1, 2 and 3 Insulated Pressure Retaining Bolted Connections" were examined during 2R12. Also, Class 2 and 3 system functional and system inservice tests were performed on various systems to fulfill the current 40-month pressure testing requirement.

Deficiency Resolution

Visual examinations (VT-1) of bolting per Examination Category B-G-2 found four components in the original outage scope with a relevant indication (evidence of coolant leakage near bolting), which resulted in a scope expansion of seven components. Examination of one of the seven additional components found boric acid residue, which resulted in an additional scope expansion of seven components. A total of nine components were found to have evidence of coolant leakage near the bolting. Four of the locations were cleaned and re-examined as acceptable. Five locations were accepted by analytical evaluation. Copies of these evaluations are included in Appendix II.

Steam Generator Tube Examination

One hundred percent of the in-service tubes were examined in the three steam generators. Results of the examinations are submitted to regulatory authorities in accordance with Technical Specification requirements.

IWL Containment Concrete Examinations

During this inspection term, the IWL examination was completed on the BVPS-1 and BVPS-2 concrete containments. The concrete surface was VT-3C examined for evidence of conditions indicative of damage or degradation. All suspect areas received a VT-1C examination. All IWL examinations were performed by qualified examiners. The qualifications were obtained through EPRI's training program. All reportable indications were identified by the examination personnel and subsequently reviewed by the Responsible Engineer. The Responsible Engineer concluded that none of the reported conditions warranted further evaluation or repair.

NIS-2 Forms

Included as Appendix III are the NIS-2 Forms associated with repairs and replacements. Code Case N-416, Alternative Pressure Test Requirement for Welded Repairs or Installation of Replacement Items by Welding, Class 1, 2 and 3, was used. The revision of Record at BVPS for Code Case N-416 is currently Revision 2.

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
001100	2CHS-PSR038	1	F-A	F1.10R	SUPPORT	VT-3	107404
002000	2CHS-PSST037	1	F-A	F1.10T	SUPPORT	VT-3	107404
004600	2CHS-PSSH658X	1	F-A	F1.10S	SUPPORT	VT-3	107408
023600	107421-MJ-04-B-1 TO 8	1	B-G-2	B7.50	PIPE BOLTING STUD BOLTS	VT-1	107421
025900	107421-MJ-01-B-1 TO 4	1	B-G-2	B7.50	PIPE BOLTING STUD BOLTS	VT-1	107421
026600	2CHS-PSSH050	1	F-A	F1.10S	SUPPORT	VT-3	107424
027400	2CHS-PSR049	1	F-A	F1.10R	SUPPORT	VT-3	107424
029400	2CHS-PSST044	1	F-A	F1.10T	SUPPORT	VT-3	107425
031200	107425-MJ-02-B-1 TO 8	1	B-G-2	B7.50	PIPE BOLTING STUD BOLTS	VT-1	107425
033500	107425-MJ-04-B-1 TO 4	1	B-G-2	B7.50	PIPE BOLTING STUD BOLTS	VT-1	107425
034200	2CHS-PSR653X	1	F-A	F1.10R	SUPPORT	VT-3	107428
034500	2CHS-PSR654X	1	F-A	F1.10R	SUPPORT	VT-3	107428
037700	2CHS-PSR067A	1	F-A	F1.10R	SUPPORT	VT-3	110733
038200	2CHS-PSR066X	1	F-A	F1.10R	SUPPORT	VT-3	110733
049500	2CHS-PSST072	1	F-A	F1.10T	SUPPORT	VT-3	110739
050000	2CHS-PSR073	1	F-A	F1.10R	SUPPORT	VT-3	110739
050500	2CHS-PSST052	1	F-A	F1.10T	SUPPORT	VT-3	110739
062500	2DGS-PSR104	1	F-A	F1.10R	SUPPORT	VT-3	110771
062900	2DGS-PSR103	1	F-A	F1.10R	SUPPORT	VT-3	110771
063300	2DGS-PSR053	1	F-A	F1.10R	SUPPORT	VT-3	110772
066100	2DGS-PSR101	1	F-A	F1.10R	SUPPORT	VT-3	110772
066200	2DGS-PSA102	1	F-A	F1.10A	SUPPORT	VT-3	110772
088500	107005-MJ-01-B-1 TO 8	1	B-G-2	B7.50	2RCS-FE480 STUD BOLTS	VT-1	107005
111200	107010-MJ-01-B-1 TO 8	1	B-G-2	B7.50	2RCS-FE481 STUD BOLTS	VT-1	107010
127600	2RCS-PSR089X	1	F-A	F1.10R	SUPPORT	VT-3	107014
129800	2RCS-PSSH052X	1	F-A	F1.10S	SUPPORT	VT-3	107014
133700	107015-MJ-01-B-1 TO 8	1	B-G-2	B7.50	2RCS-FE482 STUD BOLTS	VT-1	107015
138900	2RCS-009-F01	1	R-A	R1.11	PIPE WELD	UT	110228
139200	2RCS-009-F02	1	R-A	R1.11	PIPE WELD	UT	110228
139400	2RCS-MOV595-B-1 TO 24	1	B-G-1	B6.210	2RCS-MOV595 STUDS	UT	110228
139500	2RCS-MOV595-B-1 TO 24	1	B-G-1	B6.230	2RCS-MOV595 NUTS,BUSHINGS & WASHERS	VT-1	110228
139600	2RCS-MOV595-FLG	1	B-G-1	B6.220	2RCS-MOV595 FLANGE SURFACE	VT-1	110228
143800	2RCS-007-F03	1	R-A	R1.11	PIPE WELD	UT	110231
144100	2RCS-007-F04	1	R-A	R1.11	NOZZLE TO SAFE-END	UT	110231
148500	2RCS-008-3A-2	1	R-A	R1.11	PIPE WELD	UT	110234
148700	2RCS-084-F03	1	B-J	B9.11	PIPE WELD	UT	110235
153200	2RCS-061-F503	1	R-A	R1.11	PIPE WELD	UT	110238
154300	2RCS-060-2B-2	1	R-A	R1.11	PIPE WELD	UT	110238
154630	2RCS-044-F07	2	R-A	R1.12	SOCKET WELD	VT-2	110454

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
154660	2RCS-024-S03	2	R-A	R1.12	SOCKET WELD	VT-2	110456
156880	2RCS-PSA960	1	F-A	F1.10A	SUPPORT	VT-3	1107139
158100	2RCS-PSR115	1	F-A	F1.10R	SUPPORT	VT-3	1107140
160800	2RCS-PSSH058X	1	F-A	F1.10S	SUPPORT	VT-3	110902
162000	2RCS-PSST024	1	F-A	F1.10T	SUPPORT	VT-3	110902
166400	2RCS-PSR006	1	F-A	F1.10R	SUPPORT	VT-3	110904
172800	2RCS-202-F01	1	B-J	B9.11	PIPE WELD	UT	110907
172900	2RCS-107-F01	1	B-J	B9.11	PIPE WELD	UT	110908
173300	2RCS-PSSH032X	1	F-A	F1.10S	SUPPORT	VT-3	110908
174000	2RCS-PSR033	1	F-A	F1.10R	SUPPORT	VT-3	110908
178800	2RCS-101-F01	1	B-J	B9.11	PIPE WELD	UT	110910
180950	2RCS-RV551A-SUP	1	F-A	F1.40E	VALVE SUPPORT	VT-3	RV-43A
181700	2RCS-103-F01	1	B-J	B9.11	PIPE WELD	UT	110911
183850	2RCS-RV551C-SUP	1	F-A	F1.40E	VALVE SUPPORT	VT-3	RV-43A
184600	2RCS-102-F01	1	B-J	B9.11	PIPE WELD	UT	110912
185400	110912-MJ1-B-01 TO 12	1	B-G-2	B7.70	BOLTING FOR 2RCS*RV551B	VT-1	110912
186700	2RCS*RV551B-B-01 TO 8	1	B-G-2	B7.70	VALVE BOLTING	VT-1	110912
186750	2RCS-RV551B-SUP	1	F-A	F1.40E	VALVE SUPPORT	VT-3	RV-43A
187500	2RCS*PRE21-PEN	1	B-E	B4.20	HEATER PENETRATION WELDS	VT-2	E-1D
187600	2RCS*PRE21-101A	1	B-F	B5.40	NOZZLE-TO-SAFE-END	UT	E-1D
187650	2RCS*PRE21-101A-OV-01				SAFETY NOZZLE WELD-OVERLAY	UT	E-1D
187700	2RCS*PRE21-102B	1	B-F	B5.40	NOZZLE-TO-SAFE-END	UT	E-1D
187750	2RCS*PRE21-102B-OV-01				SAFETY NOZZLE WELD-OVERLAY	UT	E-1D
187800	2RCS*PRE21-103C	1	B-F	B5.40	NOZZLE-TO-SAFE-END	UT	E-1D
187850	2RCS*PRE21-103C-OV-01				SAFETY NOZZLE WELD-OVERLAY	UT	E-1D
187900	2RCS*PRE21-107Z	1	R-A	R1.11	NOZZLE-TO-SAFE-END	UT	E-1D
187950	2RCS*PRE21-107Z-OV-01				PORV NOZZLE WELD-OVERLAY	UT	E-1D
188000	2RCS*PRE21-202Z	1	R-A	R1.11	NOZZLE-TO-SAFE-END	UT	E-1D
188050	2RCS*PRE21-202Z-OV-01				SPRAY NOZZLE WELD-OVERLAY	UT	E-1E
188100	2RCS*PRE21-84Z	1	R-A	R1.11	NOZZLE-TO-SAFE-END	UT	E-1D
188150	2RCS*PRE21-84Z-OV-01				SURGE NOZZLE WELD-OVERLAY	UT	E-1E
190100	2RCS*PRE21-C-7	1	B-B	B2.11	CIRCUMFERENTIAL WELD	UT	E-1D
190500	2RCS*PRE21-L-6	1	B-B	B2.12	LONGITUDINAL WELD	UT	E-1D
190800	2RCS*PRE21-N-10	1	B-D	B03.110	NOZZLE-TO-VESSEL WELD	UT	E-1D
190900	2RCS*PRE21-N-10IR	1	B-D	B3.120	NOZZLE INSIDE RADIUS	UT	E-1D
191000	2RCS*PRE21-N-11	1	B-D	B03.110	NOZZLE-TO-VESSEL WELD	UT	E-1D
191100	2RCS*PRE21-N-11IR	1	B-D	B3.120	NOZZLE INSIDE RADIUS	UT	E-1D
191200	2RCS*PRE21-N-12	1	B-D	B03.110	NOZZLE-TO-VESSEL WELD	UT	E-1D
191300	2RCS*PRE21-N-12IR	1	B-D	B3.120	NOZZLE INSIDE RADIUS	UT	E-1D

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
191400	2RCS*PRE21-N-13	1	B-D	B03.110	NOZZLE-TO-VESSEL WELD	UT	E-1D
191500	2RCS*PRE21-N-13IR	1	B-D	B3.120	NOZZLE INSIDE RADIUS	UT	E-1D
196100	2RCS*P21A-C-1	1	B-L-1	B12.10	PUMP CASING WELD	VT-1	E-1C
196500	2RCS*P21A-LIG	1	B-G-1	B6.190	FLANGE LIGAMENTS	VT-1	E-1C
196600	2RCS*P21A-SUPP	1	F-A	F1.40E	INTERMEDIATE SUPPORT (INCL CS-1,-2,-3)	VT-3	E-1C
203300	2RCS*P21C(S)-B01 TO B12	1	B-G-2	B7.60	SEAL HOUSING BOLT	VT-1	E-1C
205700	2RCS*REV21-CAVLIN-A	1	F-A	F1.40E	CAVITY LINER LUGS	VT-3	E-1A
205800	2RCS*REV21-CAVLIN-B	1	F-A	F1.40E	CAVITY LINER LUGS	VT-3	E-1A
205900	2RCS*REV21-CAVLIN-C	1	F-A	F1.40E	CAVITY LINER LUGS	VT-3	E-1A
206000	2RCS*REV21-CAVLIN-D	1	F-A	F1.40E	CAVITY LINER LUGS	VT-3	E-1A
206100	2RCS*REV21-CAVLIN-E	1	F-A	F1.40E	CAVITY LINER LUGS	VT-3	E-1A
206200	2RCS*REV21-CAVLIN-F	1	F-A	F1.40E	CAVITY LINER LUGS	VT-3	E-1A
206300	2RCS*REV21-CONOSEAL-47	1	B-G-2	B7.80	CONOSEAL ASSY	VT-1	E-1A
206400	2RCS*REV21-CONOSEAL-49	1	B-G-2	B7.80	CONOSEAL ASSY	VT-1	E-1A
206500	2RCS*REV21-CONOSEAL-51	1	B-G-2	B7.80	CONOSEAL ASSY	VT-1	E-1A
206900	2RCS*REV21-CRDM NOZZLES	1	B-E	B4.12	CRDM NOZZLES	VT-2	E-1A
208910	2RCS*REV21-SHRD-SUP-1	1	F-A	F1.40E	COOLING SHROUD SUP LUG 30 DEG AXIS	VT-3	E-1A
208920	2RCS*REV21-SHRD-SUP-2	1	F-A	F1.40E	COOLING SHROUD SUP LUG 150 DEG AXIS	VT-3	E-1A
208930	2RCS*REV21-SHRD-SUP-3	1	F-A	F1.40E	COOLING SHROUD SUP LUG 270 DEG AXIS	VT-3	E-1A
209600	2RCS*REV21-INST NOZZLES	1	B-E	B4.13	INSTRUMENTATION NOZZLES	VT-2	E-1A
222300	2RCS*REV21-NUT-39	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
222400	2RCS*REV21-NUT-40	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
222500	2RCS*REV21-NUT-41	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
222600	2RCS*REV21-NUT-42	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
222700	2RCS*REV21-NUT-43	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
222800	2RCS*REV21-NUT-44	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
222900	2RCS*REV21-NUT-45	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223000	2RCS*REV21-NUT-46	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223100	2RCS*REV21-NUT-47	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223200	2RCS*REV21-NUT-48	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223300	2RCS*REV21-NUT-49	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223400	2RCS*REV21-NUT-50	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223500	2RCS*REV21-NUT-51	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223600	2RCS*REV21-NUT-52	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223700	2RCS*REV21-NUT-53	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223800	2RCS*REV21-NUT-54	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
223900	2RCS*REV21-NUT-55	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
224000	2RCS*REV21-NUT-56	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
224100	2RCS*REV21-NUT-57	1	B-G-1	B6.10	BOLTING	VT-1	E-1A

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
224200	2RCS*REV21-NUT-58	1	B-G-1	B6.10	BOLTING	VT-1	E-1A
228100	2RCS*REV21-STUD-39	1	B-G-1	B6.30	BOLTING	UT	E-1A
228200	2RCS*REV21-STUD-40	1	B-G-1	B6.30	BOLTING	UT	E-1A
228300	2RCS*REV21-STUD-41	1	B-G-1	B6.30	BOLTING	UT	E-1A
228400	2RCS*REV21-STUD-42	1	B-G-1	B6.30	BOLTING	UT	E-1A
228500	2RCS*REV21-STUD-43	1	B-G-1	B6.30	BOLTING	UT	E-1A
228600	2RCS*REV21-STUD-44	1	B-G-1	B6.30	BOLTING	UT	E-1A
228700	2RCS*REV21-STUD-45	1	B-G-1	B6.30	BOLTING	UT	E-1A
228800	2RCS*REV21-STUD-46	1	B-G-1	B6.30	BOLTING	UT	E-1A
228900	2RCS*REV21-STUD-47	1	B-G-1	B6.30	BOLTING	UT	E-1A
229000	2RCS*REV21-STUD-48	1	B-G-1	B6.30	BOLTING	UT	E-1A
229100	2RCS*REV21-STUD-49	1	B-G-1	B6.30	BOLTING	UT	E-1A
229200	2RCS*REV21-STUD-50	1	B-G-1	B6.30	BOLTING	UT	E-1A
229300	2RCS*REV21-STUD-51	1	B-G-1	B6.20	BOLTING	VT-1	E-1A
229400	2RCS*REV21-STUD-52	1	B-G-1	B6.30	BOLTING	UT	E-1A
229500	2RCS*REV21-STUD-53	1	B-G-1	B6.30	BOLTING	UT	E-1A
229600	2RCS*REV21-STUD-54	1	B-G-1	B6.30	BOLTING	UT	E-1A
229700	2RCS*REV21-STUD-55	1	B-G-1	B6.30	BOLTING	UT	E-1A
229800	2RCS*REV21-STUD-56	1	B-G-1	B6.30	BOLTING	UT	E-1A
229900	2RCS*REV21-STUD-57	1	B-G-1	B6.30	BOLTING	UT	E-1A
230000	2RCS*REV21-STUD-58	1	B-G-1	B6.30	BOLTING	UT	E-1A
233900	2RCS*REV21-WASHER-39	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234000	2RCS*REV21-WASHER-40	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234100	2RCS*REV21-WASHER-41	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234200	2RCS*REV21-WASHER-42	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234300	2RCS*REV21-WASHER-43	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234400	2RCS*REV21-WASHER-44	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234500	2RCS*REV21-WASHER-45	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234600	2RCS*REV21-WASHER-46	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234700	2RCS*REV21-WASHER-47	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234800	2RCS*REV21-WASHER-48	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
234900	2RCS*REV21-WASHER-49	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235000	2RCS*REV21-WASHER-50	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235100	2RCS*REV21-WASHER-51	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235200	2RCS*REV21-WASHER-52	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235300	2RCS*REV21-WASHER-53	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235400	2RCS*REV21-WASHER-54	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235500	2RCS*REV21-WASHER-55	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235600	2RCS*REV21-WASHER-56	1	B-G-1	B6.50	BOLTING	VT-1	E-1A

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
235700	2RCS*REV21-WASHER-57	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235800	2RCS*REV21-WASHER-58	1	B-G-1	B6.50	BOLTING	VT-1	E-1A
235831	2RCS*REV21-SUP-SAD-1	1	F-A	F1.40E	A LOOP OUTLET NOZZLE SADDLE	VT-3	E-1A
235832	2RCS*REV21-SUP-SAD-2	1	F-A	F1.40E	A LOOP INLET NOZZLE SADDLE	VT-3	E-1A
235833	2RCS*REV21-SUP-SAD-3	1	F-A	F1.40E	B LOOP OUTLET NOZZLE SADDLE	VT-3	E-1A
235834	2RCS*REV21-SUP-SAD-4	1	F-A	F1.40E	B LOOP INLET NOZZLE SADDLE	VT-3	E-1A
235835	2RCS*REV21-SUP-SAD-5	1	F-A	F1.40E	C LOOP OUTLET NOZZLE SADDLE	VT-3	E-1A
235836	2RCS*REV21-SUP-SAD-6	1	F-A	F1.40E	C LOOP INLET NOZZLE SADDLE	VT-3	E-1A
235839	2RCS*REV21-SUP-SKT	1	F-A	F1.40E	REACTOR VESSEL SUPPORT SKIRT	VT-3	E-1A
247800	2RHS-MOV702A-B-1 TO 18	1	B-G-2	B7.70	2RHS-MOV702A STUDS AND NUTS	VT-1	107120
248700	2RHS-MOV701A-B-1 TO 18	1	B-G-2	B7.70	2RHS-MOV701A STUDS AND NUTS	VT-1	107120
249100	2RHS-MOV702B-B-1 TO 18	1	B-G-2	B7.70	2RHS-MOV702B STUDS AND NUTS	VT-1	107120
250400	2RHS-MOV701B-B-1 TO 18	1	B-G-2	B7.70	2RHS-MOV701B STUDS AND NUTS	VT-1	107120
250600	2SIS-142-B-1 TO 18	1	B-G-2	B7.70	2SIS-142 STUDS AND NUTS	VT-1	108202
252300	2SIS-PSSST608	1	F-A	F1.10T	SUPPORT	VT-3	108202
252900	2RHS-MOV720B-B-1 TO 18	1	B-G-2	B7.70	2RHS-MOV720B STUDS AND NUTS	VT-1	108202
253200	2SIS-PSSH012A	1	F-A	F1.10S	SUPPORT	VT-3	108202
253400	2SIS-069-F804	1	B-K	B10.20	WELDED ATTACHMENT FOR 2SIS-PSSH012A	PT	108202
253500	2SIS-069-F805	1	B-K	B10.20	WELDED ATTACHMENT FOR 2SIS-PSSH012A	PT	108202
254400	2SIS-141-B-1 TO 18	1	B-G-2	B7.70	2SIS-141 STUDS AND NUTS	VT-1	108202
254600	2SIS-287-1A	1	R-A	R1.11	PIPE WELD	UT	108202
255500	2SIS-148-B-1 TO 18	1	B-G-2	B7.70	2SIS-148 STUDS AND NUTS	VT-1	108204
259100	2SIS-151-B-1 TO 18	1	B-G-2	B7.70	2SIS-151 STUDS AND NUTS	VT-1	108205
259800	2SIS-147-B-1 TO 18	1	B-G-2	B7.70	2SIS-147 STUDS AND NUTS	VT-1	108207
263700	2SIS-145-B-1 TO 18	1	B-G-2	B7.70	2SIS-145 STUDS AND NUTS	VT-1	108207
283900	2SIS-PSR536	1	F-A	F1.10R	SUPPORT	VT-3	110791
284500	2SIS-PSR553X	1	F-A	F1.10R	SUPPORT	VT-3	110791
302900	2SIS-271-F04	1	R-A	R1.11	PIPE WELD	UT	110829
303400	2SIS-PSSH100	1	F-A	F1.10S	SUPPORT	VT-3	110829
303600	2SIS-PSR101X	1	F-A	F1.10R	SUPPORT	VT-3	110829
304300	2SIS-271-F06A	1	R-A	R1.11	PIPE WELD	UT	110829
305200	2SIS-PSA103X	1	F-A	F1.10A	SUPPORT	VT-3	110830
306200	2SIS-PSR105X	1	F-A	F1.10R	SUPPORT	VT-3	110830
307500	2SIS-025-1B	1	R-A	R1.11	PIPE WELD	UT	110830
307650	2BDG-68-F-12	2	R-A	R1.12	SOCKET WELD	VT-2	110447
314050	2CHS-434-F02	2	R-A	R1.12	SOCKET WELD	VT-2	108301
317450	2CHS-433-F02	2	R-A	R1.12	SOCKET WELD	VT-2	108302
318900	2CHS-070-F06	2	R-A	R1.11	BUTT WELD	UT	108302
324650	2CHS-291-F403	2	R-A	R1.12	SOCKET WELD	VT-2	108304

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
325800	2CHS-320-F404	2	R-A	R1.12	SOCKET WELD	VT-2	108304
332250	2CHS-124-F409	2	R-A	R1.12	SOCKET WELD	VT-2	108306
342500	2CHS-207-F02	2	R-A	R1.12	SOCKET WELD	VT-2	108313
371900	2CHS-PSR203	2	F-A	F1.20R	SUPPORT	VT-3	108342
373850	2CHS-056-F13	2	R-A	R1.12	SOCKET WELD	VT-2	410-766
380900	2CHS-067-2A	2	R-A	R1.11	BUTT WELD	UT	108344
381300	2CHS-PSR813	2	F-A	F1.20R	SUPPORT	VT-3	108344
389400	2CHS-278-F400	2	R-A	R1.12	SOCKET WELD	VT-2	108396
389600	2CHS-278-F401	2	R-A	R1.12	SOCKET WELD	VT-2	108396
391010	2CHS-357-F-12-C	2	R-A	R1.11	BUTT WELD	UT	263020
392900	2CHS-070-F512	2	R-A	R1.11	BUTT WELD	UT	108397
393500	2CHS-275-F400	2	R-A	R1.12	SOCKET WELD	VT-2	108397
393700	2CHS-275-F401	2	R-A	R1.12	SOCKET WELD	VT-2	108397
394400	2CHS-276-F502A	2	R-A	R1.11	BUTT WELD	UT	108397
397700	2CHS-272-F400	2	R-A	R1.12	SOCKET WELD	VT-2	108398
397900	2CHS-272-F401	2	R-A	R1.12	SOCKET WELD	VT-2	108398
434700	2CHS-149-F25	2	R-A	R1.12	SOCKET WELD	VT-2	110298
462100	2CHS*P21A-A-3	2	C-C	C3.30	WELDED ATTACHMENT FOR WS-2	PT	E-2H
462200	2CHS*P21A-A-4	2	C-C	C3.30	WELDED ATTACHMENT FOR WS-1	PT	E-2H
466200	2FWS-PSSH002	2	F-A	F1.20S	SUPPORT	VT-3	101702
478400	2MSS-171-F01	2	R-A	R1.11	BUTT WELD	UT	100208
484200	2MSS-PSR003	2	F-A	F1.20R	SUPPORT	VT-3	100210
486000	2MSS-PSSH005A	2	F-A	F1.20S	SUPPORT	VT-3	100211
500200	2QSS-PSST734	2	F-A	F1.20T	SUPPORT	VT-3	107932
500300	2QSS-PSR727	2	F-A	F1.20R	SUPPORT	VT-3	107932
500700	2QSS-PSST176A	2	F-A	F1.20T	SUPPORT	VT-3	107933
500760	2QSS-234-F14	2	R-A	R1.12	SOCKET WELD	VT-2	520-118
500900	2QSS-001-F506	2	R-A	R1.11	BUTT WELD	UT	107933
501600	2QSS-1 -4AC	2	R-A	R1.11	BUTT WELD	UT	107933
502970	2QSS*P21B-SUP	2	F-A	F1.40E	PUMP SUPPORT	VT-3	107933
505450	2QSS-236-F20	2	R-A	R1.12	SOCKET WELD	VT-2	520-114
505500	2QSS-2 -3AA	2	R-A	R1.11	BUTT WELD	UT	107934
507150	2QSS-2 -5C	2	R-A	R1.11	BUTT WELD	UT	107934
507450	2QSS-117-F402	2	R-A	R1.12	SOCKET WELD	VT-2	107935
511014	2QSS-118-F02	2	R-A	R1.12	SOCKET WELD	VT-2	107938
528600	2RCS*SG21B-C-05	2	C-A	C1.10	SHELL CIRCUMFERENTIAL WELD # 5	UT	E-1B
528700	2RCS*SG21B-C-06	2	C-A	C1.10	SHELL CIRCUMFERENTIAL WELD # 6	UT	E-1B
563500	2RHS-PSST506X	2	F-A	F1.20T	SUPPORT	VT-3	108208
566500	2RHS-PSR453	2	F-A	F1.20R	SUPPORT	VT-3	110723

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
570700	2RHS-PSR750	2	F-A	F1.20R	SUPPORT	VT-3	110728
581100	2RSS-PSSH454A	2	F-A	F1.20S	SUPPORT	VT-3	107950
581200	2RSS-004-F830	2	C-C	C3.20	WELDED ATTACHMENT FOR 2RSS-PSSH454A	PT	107950
581300	2RSS-PSSH454B	2	F-A	F1.20S	SUPPORT	VT-3	107950
581400	2RSS-004-F831	2	C-C	C3.20	WELDED ATTACHMENT FOR 2RSS-PSSH454B	PT	107950
586100	2RSS-PSR108	2	F-A	F1.20R	SUPPORT	VT-3	107952
597400	2RSS-PSSH122Y	2	F-A	F1.20S	SUPPORT	VT-3	107968
597500	2RSS-009-F801	2	C-C	C3.20	WELDED ATTACHMENT FOR 2RSS-PSSH122Y	PT	107968
597600	2RSS-009-F802	2	C-C	C3.20	WELDED ATTACHMENT FOR 2RSS-PSSH122Y	PT	107968
597700	2RSS-009-F803	2	C-C	C3.20	WELDED ATTACHMENT FOR 2RSS-PSSH122Y	PT	107968
597800	2RSS-009-F804	2	C-C	C3.20	WELDED ATTACHMENT FOR 2RSS-PSSH122Y	PT	107968
613400	2RSS*E21A-WS-1	2	F-A	F1.40E	MECHANICAL RESTRAINT	VT-3	E-2L
613600	2RSS*E21A-WS-3	2	F-A	F1.40E	MECHANICAL RESTRAINT	VT-3	E-2L
613800	2RSS*E21A-N-12	2	C-B	C2.11	NOZZLE TO SHELL REINF PAD WELD	VT-3	E-2L
613850	2RSS*E21A-N-12A	2	C-B	C2.11	NOZZLE TO SHELL REINF PAD WELD	PT	E-2L
613900	2RSS*E21A-N-13	2	C-B	C2.11	NOZZLE TO SHELL REINF PAD WELD	VT-3	E-2L
613950	2RSS*E21A-N-13A	2	C-B	C2.11	NOZZLE TO SHELL REINF PAD WELD	VT-3	E-2L
614000	2RSS*E21A-WS-2	2	F-A	F1.40E	STRUCTURAL SUPPORT	VT-3	E-2L
617250	2RSS*E21A-C-17	2	C-B	C2.11	NOZZLE WELD	PT	E-2L
617270	2RSS*E21A-C-18	2	C-B	C2.11	NOZZLE WELD	PT	E-2L
621110	2RSS*P21A-A-1	2	C-C	C3.30	WELDED ATTCHMENT - GUSSET PLATE	PT	E-2M
621120	2RSS*P21A-A-2	2	C-C	C3.30	WELDED ATTCHMENT - GUSSET PLATE	PT	E-2M
621140	2RSS*P21A-A-4	2	C-C	C3.30	WELDED ATTCHMENT - GUSSET PLATE	PT	E-2M
622200	2RSS*P21A-C-09	2	C-G	C6.10	PUMP CASING WELD # 9	VT-2	E-2M
622300	2RSS*P21A-C-10	2	C-G	C6.10	PUMP CASING WELD #10	VT-2	E-2M
622400	2RSS*P21A-L-11	2	C-G	C6.10	PUMP CASING WELD #11	VT-2	E-2M
622500	2RSS*P21A-C-12	2	C-G	C6.10	PUMP CASING WELD #12	VT-2	E-2M
622600	2RSS*P21A-L-13	2	C-G	C6.10	PUMP CASING WELD #13	VT-2	E-2M
622700	2RSS*P21A-C-15	2	C-G	C6.10	PUMP CASING WELD #15	VT-2	E-2M
622800	2RSS*P21A-L-16	2	C-G	C6.10	PUMP CASING WELD #16	PT	E-2M
622900	2RSS*P21A-C-17	2	C-G	C6.10	PUMP CASING WELD #17	PT	E-2M
623000	2RSS*P21A-C-18	2	C-G	C6.10	PUMP CASING WELD #18	PT	E-2M
623100	2RSS*P21A-C-19	2	C-G	C6.10	PUMP CASING WELD #19	PT	E-2M
623200	2RSS*P21A-N-20	2	C-G	C6.10	PUMP CASING WELD #20	PT	E-2M
623400	2RSS*P21A-L-22	2	C-G	C6.10	PUMP CASING WELD #22	PT	E-2M
623800	2RSS*P21A-WS-1	2	F-A	F1.40E	PUMP SUPPORT NO. 1 - SEISMIC LUGS	VT-3	E-2M
623900	2RSS*P21A-WS-2	2	F-A	F1.40E	PUMP SUPPORT NO. 2 - SEISMIC LUGS	VT-3	E-2M
624000	2RSS*P21A-WS-3	2	F-A	F1.40E	PUMP SUPPORT NO. 3 - W/ MNTNG PLATE	VT-3	E-2M
643350	2SIS-305-F-02	2	R-A	R1.12	SOCKET WELD	VT-2	108103

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
649700	2SIS-005-F526	2	R-A	R1.11	BUTT WELD	UT	108105
660100	2SIS-PSSH359Y	2	F-A	F1.20S	SUPPORT	VT-3	108108
669250	2SIS-167-F-01	2	R-A	R1.12	SOCKET WELD	VT-2	108111
674900	2SIS-PSR017	2	F-A	F1.20R	SUPPORT	VT-3	108307
676100	2SIS-PSR012	2	F-A	F1.20R	SUPPORT	VT-3	108307
679500	2SIS-248-1AA	2	R-A	R1.11	BUTT WELD	UT	108311
680200	2SIS-PSR083Y	2	F-A	F1.20R	SUPPORT	VT-3	108311
681350	2SIS-392-F11	2	R-A	R1.12	SOCKET WELD	VT-2	410-548
681600	2SIS-PSR020	2	F-A	F1.20R	SUPPORT	VT-3	108311
692300	2SIS-PSR064	2	F-A	F1.20R	SUPPORT	VT-3	108347
697200	2SIS-PSA004	2	F-A	F1.20A	SUPPORT	VT-3	108350
697700	2SIS-PSR002	2	F-A	F1.20R	SUPPORT	VT-3	108350
715200	2SIS-PSR137Y	2	F-A	F1.20R	SUPPORT	VT-3	109931
717050	2SIS-093-F401	2	R-A	R1.12	SOCKET WELD	VT-2	109932
720500	2SIS-PSR155	2	F-A	F1.20R	SUPPORT	VT-3	109933
722600	2SIS-PSST159	2	F-A	F1.20T	SUPPORT	VT-3	109934
724100	2SIS-102-2AA	2	R-A	R1.11	BUTT WELD	UT	109935
725150	2SIS-393-F23	2	R-A	R1.12	SOCKET WELD	VT-2	510-258
735100	2SIS-PSR089R	2	F-A	F1.20R	SUPPORT	VT-3	110155
736700	2SIS-PSA282X	2	F-A	F1.20A	SUPPORT	VT-3	110165
737450	2SIS-215-F21A	2	R-A	R1.12	SOCKET WELD	VT-2	110165
741100	2SIS-PSR642	2	F-A	F1.20R	SUPPORT	VT-3	110174
749000	2SIS-104-14	2	R-A	R1.12	SOCKET WELD	VT-2	110178
751450	2SIS-377-17	2	R-A	R1.12	SOCKET WELD	VT-2	110274
755900	2SIS-PSR304R	2	F-A	F1.20R	SUPPORT	VT-3	110303
759800	2SIS-011-F04	2	R-A	R1.11	BUTT WELD	UT	1107124
767400	2SIS-PSST037B	2	F-A	F1.20T	SUPPORT	VT-3	1107129
768100	2SIS-PSR038A	2	F-A	F1.20R	SUPPORT	VT-3	1107130
770100	2SIS-PSA220	2	F-A	F1.20A	SUPPORT	VT-3	1107131
771050	2SIS-365-2	2	R-A	R1.12	SOCKET WELD	VT-2	110-009
781300	2SIS-PSR371X	2	F-A	F1.20R	SUPPORT	VT-3	110793
781400	2SIS-009-F802	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793
781500	2SIS-009-F803	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793
781600	2SIS-009-F804	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793
781700	2SIS-009-F805	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793
781800	2SIS-009-F806	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793
781900	2SIS-009-F807	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793
782000	2SIS-009-F808	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793
782100	2SIS-009-F809	2	C-C	C3.20	WELDED ATTACHMENT FOR 2SIS-PSR371X	PT	110793

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
787750	2SIS-375-F402	2	R-A	R1.12	SOCKET WELD	VT-2	110798
790900	2SIS-PSR237S	2	F-A	F1.20R	SUPPORT	VT-3	111104
791200	2SIS-PSR256S	2	F-A	F1.20R	SUPPORT	VT-3	111104
795800	2SVS-PSR019	2	F-A	F1.20R	SUPPORT	VT-3	100203
806400	2SVS-PSSH661	2	F-A	F1.20S	SUPPORT	VT-3	100217
808950	2CCP*P21B-CS-1,-2	3	F-A	F1.40E	PUMP SUPPORTS	VT-3	E-3J
817900	2CCP-PSST094Y	3	F-A	F1.30T	SUPPORT	VT-3	107210
818900	2CCP-PSR112	3	F-A	F1.30R	SUPPORT	VT-3	107210
819400	2CCP-PSR104	3	F-A	F1.30R	SUPPORT	VT-3	107211
820800	2CCP-PSR089	3	F-A	F1.30R	SUPPORT	VT-3	107212
824300	2CCP-PSR008	3	F-A	F1.30R	SUPPORT	VT-3	107216
831400	2CCP-PSR058	3	F-A	F1.30R	SUPPORT	VT-3	107221
834600	2CCP-PSR081	3	F-A	F1.30R	SUPPORT	VT-3	107226
844200	2CCP-PSR438X	3	F-A	F1.30R	SUPPORT	VT-3	110710
854700	2CCP-PSR048	3	F-A	F1.30R	SUPPORT	VT-3	120722
860640	2FNC-PSSH178	3	F-A	F1.30S	SUPPORT	VT-3	107707
860641	2FNC-004-F-800	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FNC-PSSH178	VT-1	107707
860642	2FNC-004-F-801	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FNC-PSSH178	VT-1	107707
860643	2FNC-004-F-802	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FNC-PSSH178	VT-1	107707
860644	2FNC-004-F-803	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FNC-PSSH178	VT-1	107707
860680	2FNC-PSR161	3	F-A	F1.30R	SUPPORT	VT-3	107708
862100	2FWE-PSR059Y	3	F-A	F1.30R	SUPPORT	VT-3	101602
862800	2FWE-PSR024Y	3	F-A	F1.30R	SUPPORT	VT-3	101604
864350	2FWE*P22-CS-1 TO CS-4	3	F-A	F1.40E	PUMP SUPPORTS	VT-3	E-3K
868850	2FWE*P23B-CS-1 TO CS-4	3	F-A	F1.40E	PUMP SUPPORTS	VT-3	E-3K
873100	2FWE-PSST349X	3	F-A	F1.30T	SUPPORT	VT-3	101625
873322	2FWE-PSSH017	2	F-A	F1.20S	SUPPORT	VT-3	101707
873323	2FWE-108-F-804	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FWE-PSSH017	VT-1	101707
873324	2FWE-108-F-805	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FWE-PSSH017	VT-1	101707
873325	2FWE-108-F-806	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FWE-PSSH017	VT-1	101707
873326	2FWE-108-F-807	3	D-A	D1.20	WELDED ATTACHMENT FOR 2FWE-PSSH017	VT-1	101707
873331	2FWE-PSR012A	2	F-A	F1.20R	SUPPORT	VT-3	101707
873341	2FWE-PSR021	2	F-A	F1.20R	SUPPORT	VT-3	101708
873346	2FWE-PSA028	2	F-A	F1.20A	SUPPORT	VT-3	101708
873361	2FWE-PSR340X	2	F-A	F1.20R	SUPPORT	VT-3	101617
873365	2FWE-PSST362X	2	F-A	F1.20T	SUPPORT	VT-3	101618
873367	2FWE-PSR053Y	2	F-A	F1.20R	SUPPORT	VT-3	101618
873371	2FWE-PSR048Y	2	F-A	F1.20R	SUPPORT	VT-3	101619
874100	2FWE-PSR004C	3	F-A	F1.30R	SUPPORT	VT-3	520043

APPENDIX I - 2R12 CODE EXAMINATIONS

SUMMARY	COMPID	CLASS	CAT	ITEM NO	DESCRIPTION	NDE METHOD	ISO NO
874900	2FWE-PSA002C	3	F-A	F1.30A	SUPPORT	VT-3	520147
875500	2HVC*REF24A-SPT-1	3	F-A	F1.40E	SUPPORT	VT-3	E-3X
875600	2HVC*REF24A-W-1	3	D-A	D1.10	INTEGRAL ATTACHMENT	VT-1	E-3X
876900	2HVC-PSR007	3	F-A	F1.30R	SUPPORT	VT-3	173901
877500	2MSS-PSST491	3	F-A	F1.30T	SUPPORT	VT-3	101614
880100	2SWS-PSSH760A	3	F-A	F1.30S	SUPPORT	VT-3	100403
881100	2SWS-PSR023	3	F-A	F1.30R	SUPPORT	VT-3	101902
884100	2SWS-PSR004	3	F-A	F1.30R	SUPPORT	VT-3	101906
885400	2SWS-PSA140	3	F-A	F1.30A	SUPPORT	VT-3	101908
885500	2SWS-188-F-504	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-PSA140	VT-1	101908
886700	2SWS-PSA139	3	F-A	F1.30A	SUPPORT	VT-3	101909
886800	2SWS-185-F-504	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-PSA139	VT-1	101909
889400	2SWS-PSR076	3	F-A	F1.30R	SUPPORT	VT-3	101912
889900	2SWS-PSA072	3	F-A	F1.30A	SUPPORT	VT-3	101912
890000	2SWS-201-F-517	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-PSA072	VT-1	101912
894600	2SWS-PSR130Y	3	F-A	F1.30R	SUPPORT	VT-3	101921
895600	2SWS-PSR123Y	3	F-A	F1.30R	SUPPORT	VT-3	101922
907000	2SWS-PSR210	3	F-A	F1.30R	SUPPORT	VT-3	109915
907100	2SWS-188-F-803	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-PSR210	VT-1	109915
907200	2SWS-188-F-804	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-PSR210	VT-1	109915
907300	2SWS-188-F-806	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-PSR210	VT-1	109915
907400	2SWS-188-F-812	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-PSR210	VT-1	109915
927900	2SWS-PSST657T	3	F-A	F1.30T	SUPPORT	VT-3	120731
928000	2SWS-PSR656T	3	F-A	F1.30R	SUPPORT	VT-3	120731
931000	2SWS-R283	3	F-A	F1.30H	SUPPORT	VT-3	311002
931100	2SWS-005-F-10A	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-R283	VT-1	311002
931200	2SWS-005-F-12	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-R283	VT-1	311002
931300	2SWS-005-F-29	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-R283	VT-1	311002
931400	2SWS-005-F-34	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-R283	VT-1	311002
931500	2SWS-005-F-35	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-R283	VT-1	311002
931600	2SWS-005-F-41	3	D-A	D1.20	WELDED ATTACHMENT FOR 2SWS-R283	VT-1	311002
999990	2CNMT-CONCRETE	CC	L-A	L1.10	CONTAINMENT CONCRETE	VT-1C, 3C	

APPENDIX II

ANALYTICAL EVALUATIONS

Mode Hold Resolution Form

Condition Report Number: 06-8229

Mode: 4

Functional Location: 2SIS-147

Functional Location Description: LOOP 2B SI ACCUM TK 2B CHECK

Assigned Group: Boric Acid Team

Assigned Owner: Technical Services Engineering

Mode Hold Resolution:

PROBLEM STATEMENT

The 2R12 Boric Acid walkdown identified less than 1 tablespoon of dry, trace, white boric acid located around the circumference on the body to bonnet area of valve 2SIS-147.

A photo relevant to this investigation is located at: S:\All\NDE\Boric Acid Information\2R12\2R12 Inspection Photos\692

EVALUATION

2SIS-147

COMPONENT DESCRIPTION

- Function: Loop 21B Safety Injection Accumulator Tank 21B Check Valve

Boric acid was identified at the body to bonnet area of 2SIS-147. The materials in contact with the boric acid are resistant to boric acid corrosion and are identified as follows (reference drawing 2006.300-001-113):

Body: SA 182 Type 316 stainless steel

Bonnet: SA 240 Type 316 stainless steel

Nuts: SA453 Grade 660 stainless steel

Studs: SA453 Grade 660 stainless steel

COMPONENT HISTORY

No history could be found in database or SAP

CONDITION DESCRIPTION

- Less than 1 tablespoon of dry, white, trace boric acid was found around the circumference on the body to bonnet area of valve 2SIS-147.

- No corrosion or degradation identified

- No targets identified

ASME SECTION XI CONSIDERATIONS

For 2SIS-147, boric acid has accumulated at the pressure-retaining bolted connection (body to bonnet joint), and therefore the actions per ASME Section XI, IWA-5250 (a)(2) are required. In this part of the code, it states that if leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA 3100. However, Code Case N-566-1 (reference NOP-ER-2001) and Code Case N-566-2 (reference NDE-VT-502), both entitled "Corrective Action for Leakage Identified at Bolted Connections" are accepted alternatives to this requirement and will be utilized in this case. Code Cases N-566-1 and N-566-2 require that the bolting be evaluated to determine the susceptibility of the bolting to corrosion and failure. The following evaluation provides all criteria for both Code Cases:

- (1) The number and service age of bolts: 18 studs; service age is unknown
- (2) Bolt and component material: Studs are SA 453 Grade 660 stainless steel; Nuts are SA 453 Grade 660 stainless steel; Valve body is SA 182 Type F316 stainless steel; Bonnet is SA 240 Type 316 stainless steel
- (3) Corrosiveness of process fluid: The SI Accumulator Tank boron concentration is maintained between 2300

Mode Hold Resolution Form

and 2600 ppm. However, the bolting, body and bonnet material are stainless steel and resistant to boric acid corrosion. The potential for re-wetting exists; however, the affected components are stainless steel and are not susceptible to corrosion. Therefore, there is no corrosion issue present.

(4) Leakage location and system function: Leak location is at the body-to bonnet joint for 2SIS-147. 2SIS-147 is the Loop 21B Safety Injection Accumulator Tank 21B Check Valve. The system function is to provide for passive injection of borated water into the RCS following a large break LOCA.

(5) Leakage history at the connection or other system components: No history could be found in database or SAP, but 2SIS-142 and 2SIS-148 had similar leakage found this outage.

(6) Visual evidence of corrosion at the assembled location: There is no visual evidence of corrosion or degradation at the bolted connection. Since the materials are resistant to boric acid corrosion, this is expected.

ACTIONS TAKEN

None "Accept AS-IS". Boric acid present at the body to bonnet area was evaluated for "Accept AS-IS" for leaving trace deposits as defined in NOP-ER-2001 Section 4.4.5 and was determined to be acceptable. An "As Found" visual inspection was completed satisfactorily by a Boric Acid Corrosion Control (BACC) Inspector, who did not note any degradation or other unacceptable conditions. The "As Found" visual inspection and photo will also be used as the "As Left" documentation.

CONCLUSION

The Boric Acid Team evaluated this condition per NOP-ER-2001 Section 4.4.5 and determined that the boric acid present at the body to bonnet area was an acceptable trace deposit. The Boric Acid Teams decision for this condition to "Accept AS-IS" is based on the following:

- A) There is no observed degradation on any surrounding component or structure.
- B) There are no carbon steel components in contact with the boric acid leakage.
- C) The leak is not active (not wetted). The potential for re-wetting exists however, the affected components are stainless steel and are not susceptible to corrosion.
- D) The boric acid is under insulation but all valve components are stainless steel.
- E) There are no identified targets affected.
- F) This valve is subject to relatively low pressure from the SI Accumulator (approximately 700 psig) and is normally isolated from the RCS during operation by check valve 2SIS-145.

The "As Found" condition of the valve, which will be used as the "As Left" condition of the valve and the above evaluation, provides reasonable assurance the valve will perform its intended function.

ATTACHMENTS

"As Found" inspection report, with associated photo; The "As-Found" photo documents the "As-Left" condition, RM-0411-002, Drawing RM-411-002

REFERENCES

RM-0411-002, 2006.300-001-113, NOP-ER-2001, ASME Code Case N-566-1, ASME Code Case N-566-2, NDE-VT-502

Reference Applicable Documentation:

Repair Work Order Number: N/A

Clean Work Order Number: N/A

PMT Work Order Number N/A

BCO Number: N/A

N/A Now 10-20-06
Valve Packing Review (if applicable) / Date

Mode Hold Resolution Form

CC R N 10/20/06
System Engineer Review / Date

N/A 10/20/06
Maintenance Supervisor / Date

Wendy D. Will 10-20-06
Boric Acid Program Owner / Date

George E. Sanchez 10.21.06
Operational Approval for Removal / Date
(OPS Superintendent / OPS SRO Designee)

Mode Hold Resolution Form

Condition Report Number: 06-8229

Mode: 4

Functional Location: 2SIS-148

Functional Location Description: Loop 2A SI Accumulator Tank 2A Check Valve

Assigned Group: Boric Acid Team

Assigned Owner: Technical Services Engineering

Mode Hold Resolution:

PROBLEM STATEMENT

The 2R12 Boric Acid walk down identified less than 1 tbsp (trace) of dry, white boric acid located intermittently around the circumference on the body to bonnet area of valve 2SIS-148.

A photo relevant to this investigation is located at: S:\All\NDE\Boric Acid Information\2R12\2R12 Inspection Photos\692

EVALUATION

2SIS-148

COMPONENT DESCRIPTION

- Function: Loop 2A SI Accumulator Tank 2A Check Valve

Boric acid was identified at the body to bonnet area of 2SIS-148. The materials in contact with the boric acid are resistant to boric acid corrosion and are identified as follows (reference drawing 2006.300-001-113):

Body: SA 182 Type 316 stainless steel

Bonnet: SA 240 Type 316 stainless steel

Nuts: SA453 Grade 660 stainless steel

Studs: SA453 Grade 660 stainless steel

COMPONENT HISTORY

1998 - Found light boric acid at the body to bonnet area

1990 - Found medium boric acid at the body to bonnet area

CONDITION DESCRIPTION

- Less than 1 tbsp (trace) of dry, white boric acid was found intermittently around the circumference on the body to bonnet area of valve 2SIS-148.

- No corrosion or degradation identified

- No targets identified

ASME SECTION XI CONSIDERATIONS

For 2SIS-148, boric acid has accumulated at the pressure-retaining bolted connection, and therefore the actions per ASME Section XI, IWA-5250 (a)(2) are required. In this part of the code, it states that if leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA 3100. However, Code Case N-566-1 (reference NOP-ER-2001) and Code Case N-566-2 (reference NDE-VT-502), both entitled "Corrective Action for Leakage Identified at Bolted Connections" are accepted alternatives to this requirement and will be utilized in this case. Code Cases N-566-1 and N-566-2 require that the bolting be evaluated to determine the susceptibility of the bolting to corrosion and failure. The following evaluation provides all criteria for both Code Cases:

(1) The number and service age of bolts: 18 studs; service age is unknown

(2) Bolt and component material: Studs are SA 453 Grade 660 stainless steel; Nuts are SA 453 Grade 660 stainless steel; Valve body is SA 182 Type F316 stainless steel; Bonnet is SA 240 Type 316 stainless steel

Mode Hold Resolution Form

- (3) Corrosiveness of process fluid: The SI Accumulator Tank boron concentration is maintained between 2300 and 2600 ppm. However, the bolting, body and bonnet material are stainless steel and resistant to boric acid corrosion. Therefore, there is no corrosion issue present. The potential for the area to become re-wetted exists; however, the affected materials are stainless steel and are resistant to boric acid corrosion.
- (4) Leakage location and system function: Leak location is at the body to bonnet area for 2SIS-148. 2SIS-148 is the Loop 2A SI Accumulator Tank 2A Check Valve. The system function is to provide for passive injection of borated water into the RCS following a large break LOCA.
- (5) Leakage history at the connection or other system components: Similar body-to-bonnet leak on same valve in 1998 and 1990.
- (6) Visual evidence of corrosion at the assembled location: There is no visual evidence of corrosion or degradation at the bolted connection. Since the materials are resistant to boric acid corrosion, this is expected.

ACTIONS TAKEN

None, "Accept AS-IS". Boric acid present at the body to bonnet area was evaluated for "Accept AS-IS" for leaving trace deposits as defined in NOP-ER-2001 Section 4.4.5 and was determined to be acceptable. An "As Found" visual inspection was completed satisfactorily by a Boric Acid Corrosion Control (BACC) Inspector, who did not note any degradation or other unacceptable conditions. The "As Found" visual inspection and photo will also be used as the "As Left" documentation.

CONCLUSION

The Boric Acid Team evaluated this condition per NOP-ER-2001 Section 4.4.5 and determined that the boric acid present at the body to bonnet area was an acceptable trace deposit. The Boric Acid Team's decision for this condition to "Accept AS-IS" is based on the following:

- a) There is no observed degradation on any surrounding component or structure.
- b) There are no carbon steel components in contact with the boric acid leakage.
- c) The leak is not active (not wetted). The potential for re-wetting exists; however, the affected components are stainless steel and are not susceptible to corrosion.
- d) The boric acid or its residue is normally under insulation and this leak was identified due to expanded ISI scope. Although the boric acid is under insulation, there is minor accumulation and all of the components are stainless steel and are resistant to boric acid corrosion.
- e) This valve is subject to relatively low pressure from the SI Accumulator (approximately 700 psig) and is isolated from the RCS system by check valve 2SIS-151.

The "As Found" condition of the valve, which will be used as the "As Left" condition of the valve and the above evaluation, provides reasonable assurance the valve will perform its intended function.

ATTACHMENTS

"As Found" inspection report, with associated photo; The "As-Found" photo documents the "As-Left" condition, RM-0411-002

REFERENCES

RM-0411-002, 2006.300-001-113, NOP-ER-2001, NDE-VT-502, ASME Code Case N-566-1, ASME Code Case N-566-2

Reference Applicable Documentation:

Repair Work Order Number: N/A

Clean Work Order Number: N/A

PMT Work Order Number N/A

BCO Number: N/A

Mode Hold Resolution Form

N/A NAW 10-20-06
Valve Packing Review (if applicable) / Date

CL R Hill 10/20/06
System Engineer Review / Date

N/A NAW 10-20-06
Maintenance Supervisor / Date

Wesley D. Smith 10-20-06
Boric Acid Program Owner / Date

George E. Smith 10-24-2006
Operational Approval for Removal / Date
(OPS Superintendent / OPS SRO Designee)

Mode Hold Resolution Form

Condition Report Number: 06-8271

Mode: 4

Functional Location: 2RHS-MOV701B

Functional Location Description: RHS TRAIN B SUPPLY ISOLATION

Assigned Group: Boric Acid Team

Assigned Owner: Technical Services Engineering

Mode Hold Resolution:

PROBLEM STATEMENT

The 2R12 Boric Acid walkdown identified 1 teaspoon of dry, white, clumped boric acid around the body to bonnet area of 2RHS-MOV701B. 2RHS-MOV701B is the RHS Train "B" Supply Isolation.

Photos relevant to this investigation are located at: S:\All\NDE\Boric Acid Information\2R12\2R12 Inspection Photos\718

EVALUATION

2RHS-MOV701B

COMPONENT DESCRIPTION

- Function: RHS Train 'B' Supply Isolation valve
- Boric acid deposit identified around the body to bonnet bolted connection of 2RHS-MOV701B. The materials in contact with the boric acid are resistant to boric acid corrosion and are identified as follows (reference drawing 2006.300-001-126):

Bonnet - SA182 F316 Stainless Steel

Body - SA182 F316 Stainless Steel

Body to Bonnet stud - SA453 Grade 660 (Boric acid corrosion resistant alloy)

COMPONENT HISTORY

- 1999 - Valve had light packing leakage

CONDITION DESCRIPTION

- 1 teaspoon of white, clumped, dry boric acid identified in the body to bonnet area of 2RHS-MOV701B.
- No targets identified
- No corrosion or degradation identified

ASME SECTION XI CONSIDERATIONS

For 2RHS-MOV701B, boric acid has accumulated at the pressure-retaining bolted connection (body to bonnet connection), and therefore the actions per ASME Section XI, IWA-5250 (a)(2) are required. In this part of the code, it states that if leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA 3100. However, Code Case N-566-1 (reference NOP-ER-2001) and Code Case N-566-2 (reference NDE-VT-502), both entitled "Corrective Action for Leakage Identified at Bolted Connections" are accepted alternatives to this requirement and will be utilized in this case. Code Cases N-566-1 and N-566-2 require that the bolting be evaluated to determine the susceptibility of the bolting to corrosion and failure. The following evaluation provides all criteria for both Code Cases:

- (1) The number and service age of bolts: 18 studs; service age is unknown
- (2) Bolt and component material: Studs / Nuts are SA453 Grade 660 Boric acid corrosion resistant alloy; Bonnet is SA182 Grade F316 stainless steel; Body is SA182 Grade F316 stainless steel
- (3) Corrosiveness of process fluid: the maximum RCS boron concentration is approximately 2500 ppm. However, the bolting, body and bonnet materials are stainless steel and resistant to boric acid corrosion.

Mode Hold Resolution Form

Therefore, there is no corrosion issue present. Potential for re-wetting at the body to bonnet area exist; however, the bolting, body and bonnet materials are stainless steel and resistant to boric acid corrosion.

(4) Leakage location and system function: Leak location is the body to bonnet bolted connection of the valve. 2RHS-MOV701B is the RHS Train 'B' Supply Isolation valve. The system function is to cool the reactor core during shutdown condition.

(5) Leakage history at the connection or other system components: No Body to Bonnet leakage has been observed. In 1999, leakage was observed at the packing area. 2RHS-MOV701A was found with body to bonnet leakage.

(6) Visual evidence of corrosion at the assembled location: There is no visual evidence of corrosion or degradation at the bolted connection. Since the materials are resistant to boric acid corrosion, this is expected.

ACTION TAKEN

None, accept AS-IS. An "As Found" inspection was performed by qualified NDE personnel. The "As Found" inspection and photos will document the "As Left" condition.

CONCLUSION

The Boric Acid Team evaluated this condition per NOP-ER-2001 Section 4.4.2 and determined that leaving non-trace boric acid deposits would be acceptable. The decision for "Accept AS-IS" is based on the following:

- a) The leak source is identified as the body to bonnet bolted connection.
- b) There are no carbon steel components in direct contact with the boric acid leakage.
- c) The leak is not active (not wetted). The potential for the area to become re-wetted exists; however, the bolting, body and bonnet materials are stainless steel and resistant to boric acid corrosion.
- d) There is no observed degradation on any surrounding component or structure.

The "As Found" condition of the valve, which will be used as the "As Left" condition of the valve, and the evaluation above provides reasonable assurance the valve will perform its intended function.

ATTACHMENTS:

"As Found" inspection report, with associated photo; Drawing RM-0410-001

REFERENCES:

2006.300-001-126, RM-0410-001, NOP-ER-2001, NDE-VT-502, ASME Code Case N-566-1, ASME Code Case N-566-2

Reference Applicable Documentation:

Repair Work Order Number: N/A

Clean Work Order Number: N/A

PMT Work Order Number N/A

BCO Number: N/A

N/A WOW 10-20-06
Valve Packing Review (if applicable) / Date

CE R 11/20/06
System Engineer Review / Date

N/A WOW 10-20-06
Maintenance Supervisor / Date

Mode Hold Resolution Form

Wesley D. Miller 10-20-06
Boric Acid Program Owner / Date

Gregory E. Sanders 10-24-2006
Operational Approval for Removal / Date
(OPS Superintendent / OPS SRO Designee)

Mode Hold Resolution Form

Condition Report Number: 06-7441

Mode: 4

Functional Location: 2RCS-P21C- MJ-4

Functional Location Description: Reactor Coolant Pump 21C Seal Injection Line

Assigned Group: Boric Acid Team

Assigned Owner: Technical Services Engineering

Mode Hold Resolution:

PROBLEM STATEMENT

The 2R12 Boric Acid walk down identified dry, white/brown trace boric acid deposits less than 1 tsp on the gasket of mechanical joint 4 for pump 2RCP-P21C.

A photo relevant to this investigation is located at S:\All\NDE\Boric Acid Information\2R12\2R12 Inspection Photos\738.

EVALUATION

2RCS-P21C MJ-4.

COMPONENT DESCRIPTION

- Function: Reactor Coolant Pump 21C Seal Injection Line
- Dry, white/brown boric acid deposit of less than 1 tsp on the gasket of mechanical joint 4 for 2RCS-P21C. The materials in contact with the boric acid are resistant to boric acid corrosion and are identified as follows: (2806.263-920-751)

- Flange SA-182 F316 stainless steel.
- Stud Bolts SA-193 Gr. B6 stainless steel
- Stud Nuts SA-194 Gr. 6 stainless steel

COMPONENT HISTORY

No History found in SAP or EMPAC.

CONDITION DESCRIPTION

- Less than 1 tsp. of white/brown, dry boric acid identified on the gasket of 2RCS-P21C mechanical joint 4.
- No targets identified
- No corrosion or degradation identified. The Boric Acid Inspector contributed the brown color to oil leakage.

ASME SECTION XI CONSIDERATIONS

Due to boric acid being present at a pressure-retaining bolted connection, the actions per ASME Section XI, IWA-5250 (a)(2) are required. In this part of the code, it states that if leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA 3100. However, Code Case N-566-1 (reference NOP-ER-2001) and Code Case N-566-2 (reference NDE-VT-502), both entitled "Corrective Action for Leakage Identified at Bolted Connections" are accepted alternatives to this requirement and will be utilized in this case. Code Cases N-566-1 and N-566-2 require that the bolting be evaluated to determine the susceptibility of the bolting to corrosion and failure. The following evaluation provides all criteria for both Code Cases:

- (1) The number and service age of bolts: 4 studs; service age unknown
- (2) Bolt and component material: Studs are SA-193 Grade B6 stainless steel, Nuts are SA-194 Grade 6

Mode Hold Resolution Form

stainless steel, Flexitallic Gasket is type 304 stainless steel, and Flange is SA-182 F316 stainless steel.

(3) Corrosiveness of process fluid: The maximum RCS and / or RWST boron concentration is approximately 2500 ppm. However, corrosiveness of the process fluid is not a concern since the component materials in contact with the boric acid are stainless steel and resistant to boric acid corrosion.

(4) Leakage location and system function: Leakage location is at the gasket of 2RCS-P21A mechanical joint 4. The function of mechanical joint 4 is to allow seal injection to flow to Reactor Coolant Pump 21C.

(5) Leakage history at the connection or other system components: There is no history of leakage at the flange area.

(6) Visual evidence of corrosion at the assembled location: There is no visual evidence of corrosion or degradation at the bolted connection. The Boric Acid Inspector contributed the brown color in the boric acid to oil leakage.

ACTIONS TAKEN

None "Accept AS-IS". Boric acid present at mechanical joint 4 was evaluated for "Accept AS-IS" for leaving trace deposits as defined in NOP-ER-2001 Section 4.4.5 and was determined to be acceptable. An "As Found" visual inspection was completed satisfactorily by a Boric Acid Corrosion Control (BACC) Inspector, who did not note any degradation or other unacceptable conditions. The "As Found" visual inspection and photo will also be used as the "As Left" documentation.

CONCLUSION

The Boric Acid Team evaluated this condition per NOP-ER-2001 Section 4.4.5 and determined that the boric acid present at mechanical joint 4 of 2RCS-P21C was an acceptable trace deposit. The Boric Acid Team's decision for this condition to "Accept AS-IS" is based on the following:

- A) There is no observed degradation on any surrounding component or structure.
- B) There are no carbon steel components in contact with the boric acid leakage.
- C) The leak is not active (not wetted). The potential for re-wetting exists however, the affected components are stainless steel and are not susceptible to corrosion.
- D) The boric acid or its residue is not under any insulation.
- E) The source of the leak has been determined to be from the gasket of mechanical joint 4 for 2RCS-P21C.

The "As Found" condition of the mechanical joint, which will be used as the "As Left" condition, and the above evaluation, provides reasonable assurance the joint will perform its intended function.

Attachments: "As Found" inspection report, with associated photos: The As-Found photo documents the As-Left condition: RM-0406-001

REFERENCES

RM-0406-001; 2806.263-920-751, NOP-ER-2001, Code Case N-566-1, Code Case N-566-2

Reference Applicable Documentation:

Repair Work Order Number: N/A

Clean Work Order Number: N/A

PMT Work Order Number N/A

BCO Number: N/A

N/A MMW
Valve Packing Review (if applicable) / Date

Mode Hold Resolution Form

OCR/100 10/17/06
System Engineer Review / Date

N/A 10-17-06
Maintenance Supervisor / Date

Wesley J. Will 10-17-06
Boric Acid Program Owner / Date

[Signature] 10/20/06
Operational Approval for Removal / Date
(OPS Superintendent / OPS SRO Designee)

Mode Hold Resolution Form

Condition Report Number: 06-7121

Mode: 4

Functional Location: 2SIS-142

Functional Location Description: Loop 21C Safety Injection Accumulator Tank 21C Check Valve

Assigned Group: Boric Acid Team

Assigned Owner: Technical Services Engineering

Mode Hold Resolution:

PROBLEM STATEMENT

The 2R12 Boric Acid walkdown identified approximately 1 tbsp of dry, clumped, white boric acid located intermittently around the circumference on the body to bonnet area of valve 2SIS-142.

A photo relevant to this investigation is located at: S:\All\NDE\Boric Acid Information\2R12\2R12 Inspection Photos\692

EVALUATION

2SIS-142

COMPONENT DESCRIPTION

- Function: Loop 21C Safety Injection Accumulator Tank 21C Check Valve
- Dry, white, clumped boric acid was identified at the body to bonnet area of 2SIS-142. The materials in contact with the boric acid are resistant to boric acid corrosion and are identified as follows (reference drawing 2006.300-001-113):

Body: SA 182 Type 316 stainless steel
Bonnet: SA 240 Type 316 stainless steel
Nuts: SA453 Gr 660 stainless steel
Studs: SA453 Gr 660 stainless steel

COMPONENT HISTORY

2R11 - Accepted AS-IS
2R10 - Cleaned boric acid from valve

CONDITION DESCRIPTION

- 1 tbsp of dry, white, clumped boric acid was found intermittently around the circumference on the body to bonnet area of valve 2SIS-142.
- No corrosion or degradation identified
- No targets identified

ASME SECTION XI CONSIDERATIONS

- For 2SIS-142, boric acid has accumulated at the pressure-retaining bolted connection (body to bonnet joint), and therefore the actions per ASME Section XI, IWA-5250 (a)(2) are required. In this part of the code, it states that if leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA 3100. However, Code Case N-566-1, Corrective Action for Leakage Identified at Bolted Connections is an accepted alternative to this requirement and will be utilized in this case. Code Case N-566-1 requires that the bolting be evaluated to determine the susceptibility of the bolting to corrosion and failure as follows:

- (1) the number and service age of bolts: 18 studs; service age is unknown
- (2) bolt and component material: studs are SA 453 Gr 660 stainless steel; nuts are SA 453 Grade 660

Mode Hold Resolution Form

stainless steel; valve body is SA 182 Type F316 stainless steel ; bonnet is SA 240 Type 316 stainless steel

(3) corrosiveness of process fluid: The SI Accumulator Tank boron concentration is maintained between 2300 and 2600 ppm. However, the bolting, body and bonnet material are stainless steel and resistant to boric acid corrosion. Therefore, there is no corrosion issue present.

(4) leakage location and system function: Leak location is at the body-to bonnet joint for 2SIS-142. 2SIS-142 is the Loop 21C Safety Injection Accumulator Tank 21C Check Valve. The system function is to provide for passive injection of borated water into the RCS following a large break LOCA.

(5) leakage history at the connection or other system components: Similar body-to-bonnet leak on same valve in 2R11 was accepted as is. The valve was cleaned in 2R10.

(6) visual evidence of corrosion at the assembled location: There is no visual evidence of corrosion or degradation at the bolted connection. Since the materials are resistant to boric acid corrosion, this is expected.

ACTIONS TAKEN

None "Accept AS-IS". Boric acid present at the body to bonnet area was evaluated for "Accept AS-IS" for leaving non-trace deposits as defined in NOP-ER-2001 Section 4.4.2 and was determined to be acceptable. An "As Found" visual inspection was completed satisfactorily by a Boric Acid Corrosion Control (BACC) Inspector, who did not note any degradation or other unacceptable conditions. The "As Found" visual inspection and photo will also be used as the "As Left" documentation.

CONCLUSION

The Boric Acid Team evaluated this condition per NOP-ER-2001 Section 4.4.2 and determined that the boric acid present at the body to bonnet area was an acceptable non-trace deposit. The Boric Acid Teams decision for this condition to "Accept AS-IS" is based on the following:

- A) There is no observed degradation on any surrounding component or structure. The condition shows only minimal increased leakage from the 2R11 "as left" condition.
- B) There are no carbon steel components in contact with the boric acid leakage.
- C) The leak is not active (not wetted). The potential for re-wetting exists however, the affected components are stainless steel and are not susceptible to corrosion.
- D) The boric acid or its residue is not under any insulation.
- E) There are no identified targets affected.
- F) This valve is subject to relatively low pressure from the SI Accumulator (approximately 700 psig) and is normally isolated from the RCS during operation by check valve 2SIS-141.

The "As Found" condition of the valve, which will be used as the "As Left" condition of the valve and the above evaluation, provides reasonable assurance the valve will perform its intended function.

Attachments: "As Found" inspection report, with associated photo; The "As-Found" photo documents the "As-Left" condition, RM-0411-002

Ref: RM-0411-002, 2006-300-001-113, NOP-ER-2001, Code Case N-566-1

Reference Applicable Documentation:

Repair Work Order Number: N/A

Clean Work Order Number: N/A

PMT Work Order Number N/A

BCO Number: N/A

N/A MPM 10/16/06
Valve Packing Review (if applicable) / Date

Mode Hold Resolution Form

Xing R Xing 10/16/06
System Engineer Review / Date

N/A APM 10/14/06
Maintenance Supervisor / Date

Walter D. Williams 10/17/06
Boric Acid Program Owner / Date

George E. Sanchez 10.23.06
Operational Approval for Removal / Date
(OPS Superintendent / OPS SRO Designee)

APPENDIX III

**REPAIR / REPLACEMENT ABSTRACT
AND
NIS-2 FORMS**

NIS-2 ABSTRACT

<u>FORM NO.</u>	<u>ASSET NUMBER</u>	<u>ORDER NO.</u>	<u>COMMENTS</u>
1509	2CCP-450	200016239	Installed
1623	2-SWS-002-090-3	03-0061-01	Installed
"	2-SWS-002-756-3	"	"
"	2-SWS-150-965-3	"	"
"	2-SWS-002-751-3	"	"
"	2-SWS-150-964-3	"	"
1730	2DGS-RV115	200025374	Corrected
"	"	200159769	"
1758	2SWS-79	200059246	Installed
1764	2MSS-SV101C	200084052	Installed
1765	2MSS-SV102C	200086068	Installed
1766	2MSS-SV103C	200016310	Installed
1767	2MSS-SV104C	200016316	Installed
1810	2-SWS-002-755-3	03-0061-02	Installed
"	2-SWS-002-760-3	"	"
"	2-SWS-150-968-3	"	"
"	2-SWS-150-969-3	"	"
1815	2FNC-109	200105607	Corrected
1823	2SWS-P21A	200109376	Corrected
1841	2CCP-EJM214B	200136803	Corrected
1901	2CHS-12	200086279	Corrected
1904	2QSS-2	200168856	Corrected
1914	2CHS-P21A	200036098	Corrected
"	"	200015415	Corrected
1915	2-SWS-003-612-3	200213588	Installed
1927	2-QSS-002-217-2	200213621	Installed
"	2QSS-PSR063R	"	Corrected
1930	2CHS-P21B	200018129	Corrected
"	"	200016616	Corrected
1931	2MSS-AOV101A	200158719	Corrected
1934	2MSS-SV105C	200016324	Installed
1935	2RCS-PRE21	200169234	Corrected
"	"	200169235	"
"	"	200169236	"
"	"	200169237	"
"	"	200169240	"
"	"	200169241	"
1936	2FWE-FCV122	200020055	Corrected
1937	2CCP-238	200135817	Corrected
1939	2SVS-82	200157419	Corrected
1942	2EGF-TK21A	200095841	Corrected
1943	2SWS-1231	200148267	Corrected
1945	2CHS-FCV122	200152731	Corrected
1946	2CHS-RV203	200166575	Corrected

NIS-2 ABSTRACT

<u>FORM NO.</u>	<u>ASSET NUMBER</u>	<u>ORDER NO.</u>	<u>COMMENTS</u>
1947	2RCS-RV551B	200166403	Installed
1950	2BDG-AOV102C2	200156080	Corrected
1954	2EGF-TK21B	200165607	Corrected
1955	2RCS-PCV456	200165646	Corrected
1964	2QSS-1	200154335	Corrected
1972	2RCS-50	200232622	Removed
"	2RCS-PSA960	"	Installed
1973	2RCS-REV21	200232789	Corrected
"	"	200167097	"
1974	2RCS-635	200232912	Removed
1976	2RCS-SG21A	7024829	Corrected
1977	2RCS-SG21B	7024829	Corrected
1978	2RCS-SG21C	7024829	Corrected
1979	2MSS-AOV101C	200235524	Corrected
1994	2CHS-PSSP006	200169557	Replacement
1995	2CHS-PSSP015X	200169558	Replacement
1996	2SIS-PSSP208X	200169571	Replacement
1997	2SIS-PSSP209A	200169572	Replacement
1998	2MSS-PSSP151A	200169565	Replacement
1999	2RCS-PSSP015X	200169550	Replacement
2000	2RHS-PSSP522X	200169568	Replacement
2001	2MSS-PSSP001	200169579	Replacement
2002	2MSS-PSSP131B	200169581	Replacement

Form No. 1509

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/24/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200016239
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS- Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Primary Component Cooling Water (Class 3)
5. (a) Applicable Construction Code Section III 1971 Edition, S72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N-416-2

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Henry Vogt	99-214959	N/A	2CCP-450	1983	Removed	Yes
Gate Valve	Henry Vogt	83-168860	N/A	2CCP-450	1974	Installed	Yes

7. Description of Work
- Replaced valve and pipe.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No Previous NIS-2 Data Report. Manufacturers' Data Report attached.Applicable Manufacturer's Data Reports to be attached2" Valve PO# 45107090 2" Pipe PO# 47052588, Ht. #A45140.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 10, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-13-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 72384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-13-, 20 06

As Required by the Provisions of the ASME Code Rules

Main Steam System
(Brief description of service for which equipment was designed)

(a) Drawing No. E-48494 Prepared by Henry Vogt Machine Company

(b) National Board No. _____

6. Design Conditions 1440 psi 100 °F
(Pressure) (Temperature)

7. The material, design, construction, and workmanship complies with ASME Code Section III, Class 2

Edition July, 71, Addenda Date Winter, 72, Case No. _____

[illegible]

FORM NIV-1 (back)

	Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting	B7	SA-193 B7	Texas Bolt	
(d) Shaft (Gate)	BXR	SA-479 (Chemistry Only)	Vogt	

8. Hydrostatic test 2175 psi.

CERTIFICATION OF DESIGN

Design information on file at Henry Vogt Machine Company
 Stress analysis report on file at _____
 Design specifications certified by B. H. Leonard, Jr. (1) Prof. Eng. State Texas Reg. No. 25165
 Stress analysis report certified by _____ (1) Prof. Eng. State _____ Reg. No. _____
 (1) Signature not required. List name only. Y

We certify that the statements made in this report are correct.

Date April 8, 19 74 Signed Henry Vogt Mach. Co. By (Manufacturer)

Certificate of Authorization No. N-357 expires Jan. 11, 1975

CERTIFICATE OF SHOP INSPECTION

1. the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of Kentucky and employed by Commercial Union Ins.Co. of Boston, Massachusetts have inspected the equipment described in this Data Report on March 29, 1974 and state that on the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date April 8, 1974

W. L. ...
(Inspector)

Conclusion:

Kentucky 11

(National, Local, State, Province and No.)

Form No. 1623

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner First Energy Date 8/22/06
(NAME)
Shippingport, PA 15077 Sheet 1 of 1
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 2
(NAME)
Shippingport, PA 15077 ECP-03-00061-01
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date N/A
4. Identification of System Service Water (Code Class 3)
5. (a) Applicable Construction Code ASME Section III 1971 Edition, Winter '72 Addenda,
Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe	N/A	N/A	N/A	2-SWS-002-090-3	2006	Installed	No
Pipe	N/A	N/A	N/A	2-SWS-002-756-3	2006	Installed	No
Pipe	N/A	N/A	N/A	2-SWS-150-965-3	2006	Installed	No
Pipe	N/A	N/A	N/A	2-SWS-002-751-3	2006	Installed	No
Pipe	N/A	N/A	N/A	2-SWS-150-964-3	2006	Installed	No

7. Description of Work Replace SWS piping for 2CHS-E25A, "A" CHS Pump lube oil cooler per ECP-03-0061-01. This ECP replaced Carbon steel piping with corrosion resistant AL6XN piping and Fittings; also replaced carbon steel vent and drain valves with stainless steel valves.

8. Tests Conducted: Hydrostatic* ☒ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure 165 psi Test Temp. Ambient °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/ASigned Sanjib K. Mukherjee Date 9/21, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB-CT of

Hartford, Connecticut

have inspected the components described in this

Owner's Report during the period 10-11-03 4-4-05 to 4-27-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Hyatt
Inspector's Signature

Commissions

I, N, PA 2384
National Board, State, Province, and Endorsements

Date 9-27-, 20 06

Form No. 1730

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 06/16/05
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order Nos: 200025374, 200159769
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Primary Drains (Class 2)
5. (a) Applicable Construction Code Section III 1974 Edition, S'74 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser International	TG-36568	N/A	2DGS-RV115	1984	Corrected	Yes
Spindle	Dresser Valve	N/A	N/A	N/A	2005	Installed	No
Spring	Dresser International	N/A	N/A	Ht. #157428	1987	Installed	No
Disc	Dresser Valve	ADC62	N/A	N/A	2000	Installed	Yes
Nozzle	Dresser Valve	ADF65	N/A	N/A	2001	Installed	Yes

7. Description of Work
- Replaced spindle, spring, disc assembly, nozzle, and flange studs/nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. Previous NIS-2 Data Report No. 198. New inlet flange 1/2"
Applicable Manufacturer's Data Reports to be attached
studs & nuts were installed per Order 200159769. Studs: P.O. 47050301, Ht. #M600, Nuts: P.O.
7075105 and 45110156, Ht. #B960.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 20, 20 06
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384
 Inspector's Signature National Board, State, Province, and Endorsements

Date 11-21-, 20 06

NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Dresser Valve Division; Dresser Equipment Group, Inc.
Intersection Hwy. 167 @ 3225 North, Alexandria, Louisiana 71309
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corporation P. O. Box 3611 Akron, Ohio 44309-3611
(name and address of purchaser)
3. Location of installation First Energy Corporation Beaver Valley Power Station Shippingport, Pennsylvania 15077
(name and address)
4. Type OS418 SA479 TYPE 316 75 KSI MIN. N/A 2000
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code Section III, Division 1: 1974 Summer 1974 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no)
7. Remarks : Serial Numbers Are Used In Lieu Of NPT Stamping.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) <u>ADC62</u>		(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi Temp. N/A °F. Hydro. Test pressure 4500 PSIG at temp. °F

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet. (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. ADC62 through _____

CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. No. N/A
(when applicable)

Design report* certified by N/A P.E. State N/A Reg. No. N/A
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) DISC
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2001

Date 10-6-00 Name SEE LINE 1 Signed Virgil Beamer
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State or Province of LOUISIANA and employed by H. S. B. I. & I. Co.
of HARTFORD, CT. have inspected these items described in this Data Report on 10/9/00, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 10/9/00 Signed [Signature] Commissions LA664
(Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Dresser Valve Division; Dresser Equipment Group, Inc.
Intersection Hwy. 167 @ 3225 North, Alexandria, Louisiana 71309
(name and address of NPT Certificate Holder)

2. Manufactured for First Energy Corporation P. O. Box 3611 Akron, Ohio 44309-3611
(name and address of purchaser)

3. Location of installation First Energy Corporation Beaver Valley Power Station Shippingport, Pennsylvania 15077
(name and address)

4. Type OS418 SA182 GRADE F316 75 KSI N/A 2001
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code Section III, Division 1: 1974 Summer 1974 2 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no)

7. Remarks : Serial Numbers Are Used In Lieu Of NPT Stamping.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) ADF65		(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi Temp. N/A °F. Hydro. Test pressure 4500 PSIG at temp. °F

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial Nos. ADF65 through _____

CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. No. N/A
(when applicable)

Design report* certified by N/A P.E. State N/A Reg. No. N/A
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) NOZZLE
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2004

Date 6-11-01 Name SEE LINE 1 Signed V J Beaver
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State or Province
of LOUISIANA and employed by H. S. B. I. & I. Co.
of HARTFORD, CT. have inspected these items described in this Data Report on 6/11/01, and state that to the
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage
or loss of any kind arising from or connected with this inspection.

Date 6/11/01 Signed [Signature] Commissions LAB64
(Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Form No. 1758

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/30/06
(NAME)
- 76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
- Shippingport, PA 15077 200059246
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Maintenance Type Code Symbol Stamp N/A
(NAME)
- Shippingport, PA 15077 Authorization No. N/A
(ADDRESS)
- Expiration Date "
4. Identification of System Service Water (Class 3)

5. (a) Applicable Construction Code ASME III 1971 Edition, S72 Addenda, N/A Code Case
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
- (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Crane Nuclear	C8993	N/A	N/A	2000	Removed	Yes
Valve	Crane Nuclear	D3921	N/A	2SWS-79	2006	Installed	Yes
Pipe 3"	Energy & Process	N/A	N/A	HT# A41651	2002	Installed	No
Elbow 3"	Energy & Process	N/A	N/A	HT# N955C	2005	Installed	No
Flange 3"	Dubose	N/A	N/A	HT# S1128	1999	Installed	No
Studs 5/8"-11	NOVA Machine	N/A	N/A	HT# X257	2005	Installed	No
Nuts 5/8"-11	NOVA Machine	N/A	N/A	HT# X511	2005	Installed	No

7. Description of Work Replaced Valve, Flange, Piping, and 5/8"-11 Studs and Nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report: 1352. Manufacturer's Data Report attached.Applicable Manufacturer's Data Reports to be attachedValve PO# 45141438, Pipe PO# 7099495-5, Elbow PO# 451'67097, Flange PO# 100100,Stud PO# 45168676, and Nut PO# 451780580

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed

Senior SpecialistOwner or Owner's Designee, Title

Date

November 1, 20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period

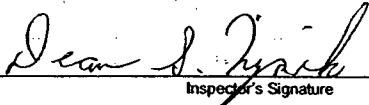
4-27-05

to

11-1-06

, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions

I, N. PA 2384National Board, State, Province, and Endorsements

Date

11-1-, 2006

FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by CRANE Nuclear, Inc., 860 Remington Boulevard, Bolingbrook, IL 60440
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corporation, PO Box 345 Shippingport, PA 15077
(name and address of purchaser)
3. Location of installation Beaver Valley Nuclear Power Plant, Route 168, Shippingport, PA 15077
(name and address)

4. Model No., Series No., or Type 5202WE Drawing CC03636 Rev. A CRN N/A

5. ASME Code, Section III, Division 1: 1971 Summer 1972 3 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Pump or valve Gate Valve Nominal inlet size 3 Outlet size 3
(in.) (in.)

7. Material:

(a) valve (b) pump	Body Casting	SA216 WCB N/A	Bonnet Cover	SA216 WCB N/A	Disk Bolting	SA216 WCB N/A	Bolting	SA193 B7 SA194 2H
(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.	<div style="position: relative; height: 100px;"> / </div>			
D3921	N/A	D3922	D5391	D3927				

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00037) may be obtained from the Order Dept. ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NPV-1 (Back) --- Pg. 2 of 2

Certificate Holder's Serial No. 03921

8. Design conditions _____ Psi _____ °F or valve pressure class _____ 150 _____ (1)
(pressure) (temperature)
9. Cold working pressure _____ 275 _____ Psi at 100°F
10. Hydrostatic test _____ 425 _____ Psi. Disk differential test pressure _____ 305 _____ Psi
11. Remarks: SO No. 25513-01 PO 45141438, Item 00001
Replacement Valve for Tag No.: VGW-015-A-3


CERTIFICATION OF DESIGN

Design Specifications certified by	<u>Alan J. Fiorente</u>	P.E. State	<u>PA</u>	Reg. No.	<u>032366-E</u>
Design Report certified by	<u>N/A</u>	P.E. State	<u>N/A</u>	Reg. No.	<u>N/A</u>

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2899 Expires September 24, 2008


Date 06/14/06 Name CRANE Nuclear, Inc. Signed 
(N Certificate Holder) (Authorized Representative)

Jerome A. Kurowski, P.E.

CERTIFICATE OF INSPECTION

1. I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Illinois and employed by HSBCT of Hartford, CT Have inspected the pump, or valve, described in this Data Report on June 14, 2006 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the Component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 06/14/06 Signed  Commissions IL 1903
(Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. And no.)
Todd Ward

(1) For manually operated valves only.

Form No. 1764

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/04/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200084052
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Construction Service Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class 2)
5. (a) Applicable Construction Code Section III 1971 Edition, S'73 Addenda, 1574 Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Crosby Valve	N57636-00-0003	736	2MSS-SV101C	1977	Removed	Yes
Safety Valve	Anderson Greenwood Crosby	N57636-00-0020	N/A	2MSS-SV101C	2003	Installed	Yes
Plug	Energy & Process	N/A	N/A	Lot #9428	2006	Installed	No

7. Description of Work
- Replaced valve, inlet flange nuts, and installed a drain plug.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. Replacement 1-3/8" Nuts: P.O. 45136785 / Ht. #P366, P.O. 104336-15 / Ht. #73265-32-2-R.
Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 22, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions IN, P42384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-1-, 20 06

CROSBY**CROSBY VALVE & GAGE COMPANY**
WRENTHAM, MASS**FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES**
As required by the Provisions of the ASME Code Rules**G.C.-44C****DATA REPORT**
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
HA-65- Name and Address
Model No. FN Order No. N41990 Contract Date 1/16/74 National Board No. 736

2. Manufactured For Stone & Webster Engineering Corporation Order No. 2BV-225
Name and Address

3. Owner Duquesne Light Co., Shippingport, Pennsylvania
Name and Address

4. Location of Plant Beaver Valley Power Station, Shippingport, Pennsylvania

5. Valve Identification 2MSS-SV101C Serial No. N57636-00-0003 Drawing No. DS-C-57636 Rev. D
Type Safety Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch
6. Set Pressure (PSIG) 1075 561° F
Rated Temperature
Stamped Capacity 811237 3 % Overpressure 5% Blowdown (PSIG) 54
Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ---

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 2 Edition 1971, Addenda Date Summer 1973, Case No. 1574

Pressure Containing or Pressure Retaining Components

Forgings	Serial No. Identification	Material Specification Including Type or Grade
a. XXXXXX		
Body	<u>N90810-31-0006</u>	<u>ASTM A105-73</u> <u>ASME SA105</u>
Bonnet	<u>N90813-31-0006</u>	<u>ASTM A105-73</u> <u>ASME SA105</u>
b. Bar Stock and Forgings		
Support Rods		<u>ASTM A182-73 Gr. F316</u> <u>ASME SA182 Gr. F316</u>
Nozzle	<u>N90812-31-0014</u>	<u>ASTM A182-73 Gr. F316</u> <u>ASME SA182 Gr. F316</u>
Disc Insert	<u>N91124-34-0094</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Spring Washers <u>K57217-33-0033</u>	<u>N90089-36-0106</u> <u>N89001-39-0200</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Adjusting Bolt	<u>N90766-32-0040</u>	<u>ASTM A193-73 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Spindle <u>K57208-33-0069</u>	<u>N88895-41-0142</u>	

VALLEY UNIT 2

I. Q. 12241 P.O. NO. 28V-225

MARK NO. 2MS-SV 1015

VENDOR'S NAME Crosby Material Specification:

Serial No. or

Identification

Including Type or Grade

c. Spring K57217-33-0033

NX2626-0080

ASTM A552

d. Bolting

e. Other Parts such as Pilot Components

Bearing Adapter

N90087-38-0111

ASTM A193-71 Gr. B6

ASME SA193 Gr. B6

Stud

N88480-0588 thru 0593

ASTM A193 Gr. B7

ASME SA193 Gr. B7

Nut

N88481-0588 thru 0593

ASTM A194 Cl. 2H

ASME SA194 Cl. 2H

Stud

N90764-0301 thru 0312

ASTM A193 Gr. B7

ASME SA193 Gr. B7

We certify that the statements made in this report are correct.

Date 2-15 19 77 Signed Crosby Valve & Gage Co. By [Signature]
Manufacturer

QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by: Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on 2-15 19 77 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date

19 77

Penn. WC-2153

(Inspector)

Commissions

Mar 26 9
National Board State, Provincial and No.

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Division.

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES

As required by the Provisions of the ASME Code Rules

DATA REPORT

1. Manufactured By Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
Name and Address
Model No. HA 65 FN Order No. U713050000 Contract Date 5/28/03 National Board No. ---

2. Manufactured For FIRST ENERGY CORP. Order No. 7125633
Name and Address

3. Owner FIRST ENERGY CORP., SHIPPINGPORT, PA
Name and Address

4. Location of Plant BEAVER VALLEY, SHIPPINGPORT, PA

5. Valve Identification SPARE Serial No. N57636-00-0020 Drawing No. DS-C-57636 REV. F
Type SAFETY Orifice Size 4.513 Pipe Size --- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch
6. Set Pressure (PSIG) 1075 555 ° F
Rated Temperature
Stamped Capacity 818685 @ 3 % Overpressure 5% Blowdown (psig) 54
Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ---

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 2 Edition 1971 Addenda Date SUMMER 1973 Case No. 1574

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	<u>N90810-34-0022</u>	<u>ASTM A105</u>
Bonnet	<u>N90813-33-0020</u>	<u>ASTM A105</u>
b. Bar Stock and Forgings		
Support Rods	<u>---</u>	<u>---</u>
Nozzle	<u>N90812-37-0022</u>	<u>ASTM A182 F316</u>
Disc	<u>N91124-77-0411</u>	<u>ASTM A182 F316</u>
	<u>N90089-51-0155</u>	<u>ASTM A105</u>
Spring Washers	<u>N89001-64-0301</u>	<u>ASTM A105</u>
Adjusting Bolt	<u>N90766-43-0127</u>	<u>ASTM A193 B6</u>
Spindle	<u>N88895-69-0399</u>	<u>ASTM A193 B6</u>

	Serial No. Identification	Material Specification Including Type or Grade
c. Spring	NX2626-0141	ASTM A689
d. Bolting	---	---
e. Other Parts such as Pilot Components		
BEARING ADAPTER	N90087-54-0396	ASTM A193 B6
BONNET STUD	N88480 - NE53	ASTM A193 GR B7
BONNET NUT	N88481 - DHJ4(3) & AF3	ASTM A194 CL 2H
INLET STUD	N90764 - J45-1	ASTM A193 GR B7

We certify that the statements made in this report are correct.

Date 5-DEC 20 03 Signed Anderson Greenwood Crosby
Wrentham, MA By [Signature]
 Manufacturer

Certificate of Authorization No. N-1878 Expires Sep. 30, 2004
 Date

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MASS and employed by

ABS Group Inc., Houston, Texas

have inspected the equipment described in this Data Report on

11-17-2003 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date DEC 5, 2003

[Signature]
 (Inspector)

Commissions

MA-1420-N
 (National Board, State, Province and No.)

Form No. 1765

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/04/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200086068
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Construction Service Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class 2)
5. (a) Applicable Construction Code Section III 1971 Edition, S'73 Addenda, 1574 Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Crosby Valve	N57636-00-0006	739	2MSS-SV102C	1977	Removed	Yes
Safety Valve	Anderson Greenwood Crosby	N57636-00-0019	N/A	2MSS-SV102C	2003	Installed	Yes
Plug	Energy & Process	N/A	N/A	Lot #9428	2006	Installed	No

7. Description of Work Replaced valve, inlet flange nuts, and installed a drain plug.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replacement 1-3/8" Nuts: P.O. 45136785 / Ht. #P366, P.O.
104336-15 / Ht. #73265-32-R.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 22, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 42384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-1, 20 06



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

G.C.-44C

DATA REPORT
Safety and Safety Relief Valves

Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
Name and Address
Model No. FN Order No. N41990 Contract Date 1/16/74 National Board No. 739
Manufactured For Stone & Webster Engineering Corp. Order No. 2BV-225
Name and Address
Owner Duquesne Light Co., Shippingport, Pennsylvania
Name and Address
Location of Plant Beaver Valley Power Station, Shippingport, Pennsylvania
Valve Identification 2MSS-SV102C Serial No. N57636-00-0006 Drawing No. DS-C-57636 Rev. D
Type Safety Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety Safety Relief Pilot Power Actuated Inch Inch Inch Inch
Set Pressure (PSIG) 1085 561^o
Rated Temperature
Stamped Capacity 818685 3 % Overpressure 5% Blowdown (PSIG) 54
Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ---

1. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 2 Edition 1971, Addenda Date Summer 1973, Case No. 1574

Pressure Containing or Pressure Retaining Components

Forgings

a. ~~XXXXXX~~

Body

Serial No.
Identification

N90810-31-0014

Material Specification
Including Type or Grade

ASTM A105-73

ASME SA105

Bonnet

N90813-31-0002

ASTM A105-73

ASME SA105

b. Bar Stock and Forgings

Support Rods

Nozzle

Disc Insert

Spring Washers

Adjusting Bolt

Spindle

K57217-33-0036

K57208-33-0072

N90812-31-0010

N91124-34-0087

N90089-36-0097

N89001-39-0202

N90766-32-0038

N88895-41-0145

ASTM A182-73 Gr. F316

ASME SA182 Gr. F316

ASTM A182-73 Gr. F316

ASME SA182 Gr. F316

ASTM A105-71

ASME SA105

ASTM A193-71 Gr. B6

ASME SA193 Gr. B6

ASTM A193-73 Gr. B6

ASME SA193 Gr. B6

MARK NO. 2015-50 102C

VENDOR'S NAME CROSBY

Serial No. or

Identification

Including Type or Grade

c. Spring K57217-33-0072

NX2626-0071

ASTM A552

d. Bolting

e. Other Parts such as Pilot Components

Bearing Aflapier

N90087-36-0100

ASTM A193-71 Gr. B6

Stud

N88480-0606 thru 0611

ASME SA193 Gr. B6

Nut

N88481-0606 thru 0611

ASTM A193 Gr. B7

Stud

N90764-0337 thru 0384

ASME SA193 Gr. B7

ASTM A193 Gr. B7

ASME SA193 Gr. B7

We certify that the statements made in this report are correct.

Date 2-15 19 77 Signed Crosby Valve & Gage Co. Manufacturer

By [Signature] QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass.

have inspected the equipment described in this Data Report on 2-15 19 77 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2-15 19 77

Penn. WC-2153

[Signature]
(Inspector)

Commission

MA11209

National Board, State, Province, and No.

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Division.

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES

As required by the Provisions of the ASME Code Rules

DATA REPORT

1. Manufactured By Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
Name and Address
Model No. HA 65 FN Order No. U713050000 Contract Date 5/28/03 National Board No. ---

2. Manufactured For FIRST ENERGY CORP. Order No. 7125633
Name and Address

3. Owner FIRST ENERGY CORP., SHIPPINGPORT, PA
Name and Address

4. Location of Plant BEAVER VALLEY, SHIPPINGPORT, PA

5. Valve Identification SPARE Serial No. N57636-00-0019 Drawing No. DS-C-57636 REV. F
Type SAFETY Orifice Size 4.513 Pipe Size --- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch

6. Set Pressure (PSIG) 1085 556 ° F
Rated Temperature
Stamped Capacity 818685 @ 3 % Overpressure 5% Blowdown (psig) 54
Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ---

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 2 Edition 1971 Addenda Date SUMMER 1973 Case No. 1574

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	<u>N90810-34-0019</u>	<u>ASTM A105</u>
Bonnet	<u>N90813-33-0019</u>	<u>ASTM A105</u>
b. Bar Stock and Forgings		
Support Rods	<u>---</u>	<u>---</u>
Nozzle	<u>N90812-37-0023</u>	<u>ASTM A182 F316</u>
Disc	<u>N91124-77-0409</u>	<u>ASTM A182 F316</u>
	<u>N90089-51-0153</u>	<u>ASTM A105</u>
Spring Washers	<u>N89001-64-0300</u>	<u>ASTM A105</u>
Adjusting Bolt	<u>N90766-43-0126</u>	<u>ASTM A193 B6</u>
Spindle	<u>N88895-69-0391</u>	<u>ASTM A193 B6</u>

	Serial No. Identification	Material Specification Including Type or Grade
c. Spring	NX2626-0140	ASTM A689
d. Bolting	---	---
e. Other Parts such as Pilot Components		
BEARING ADAPTER	N90087-56-0416	ASTM A193 B6
BONNET STUD	N88480 - NE53	ASTM A193 GR B7
BONNET NUT	N88481 - DHJ4	ASTM A194 CL 2H
INLET STUD	N90764 - J96	ASTM A193 GR B7

We certify that the statements made in this report are correct.

Date 5-DEC 20 03 Signed Anderson Greenwood Crosby
Wrentham, MA By [Signature]
 Manufacturer

Certificate of Authorization No. N-1878 Expires Sep. 30, 2004
 Date

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MASS and employed by

ABS Group Inc., Houston, Texas

have inspected the equipment described in this Data Report on

11-17-2003 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date DEC 5, 2003

[Signature]
 (Inspector)

Commissions

MA-1420-N
 (National Board, State, Province and No.)

Form No. 1766

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/04/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200016310
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS-Construction Service Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Main Steam (Class 2)

5. (a) Applicable Construction Code Section III 1971 Edition, S'73 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Crosby Valve	N57636-00-0009	742	2MSS-SV103C	1977	Removed	Yes
Safety Valve	Anderson Greenwood Crosby	N57636-00-0018	N/A	2MSS-SV103C	2003	Installed	Yes
Plug	Energy & Process	N/A	N/A	Lot #9428	2006	Installed	No

7. Description of Work Replaced valve, inlet flange nuts, and installed a drain plug.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replacement 1-3/8" Nuts: P.O. 45136785 / Ht. #P366.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A

Expiration Date

N/ASigned [Signature]

Senior Specialist

Date

November 22, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions

I, N, P+2384
National Board, State, Province, and Endorsements

Date

12-1-

, 20

06

CROSBY**CROSBY VALVE & GAGE COMPANY**
WRENTHAM, MASS**FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES**
As required by the Provisions of the ASME Code Rules**Q.C.-44C****DATA REPORT**
Safety and Safety Relief Valves

Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
Name and Address HA-65-

Model No. FN Order No. N41990 Contract Date 1/16/74 National Board No. 742

Manufactured For Stone & Webster Engineering Corp. Order No. 2BV-225
Name and Address

Owner Duquesne Light Co., Shippingport, Pennsylvania
Name and Address

Location of Plant Beaver Valley Power Station, Shippingport, Pennsylvania

Valve Identification 2MSS-SV103C Serial No. N57636-00-0009 Drawing No. DS-C-57636 Rev. D

Type Safety Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

Set Pressure (PSIG) 1095 561°
Rated Temperature F

Stamped Capacity 826132 3 % Overpressure 5% Blowdown (PSIG) 55

Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ---

The material, design, construction and workmanship comply with ASME Code, Section III.

Class 2 Edition 1971, Addenda Date Summer 1973, Case No. 1574

Pressure Containing or Pressure Retaining Components

Forgings	Serial No. Identification	Material Specification Including Type or Grade
a. XXXXXX		
Body	<u>N90810-31-0015</u>	<u>ASTM A105-73</u> <u>ASME SA105</u>
Bonnet	<u>N90813-31-0008</u>	<u>Astm A 105-73</u> <u>Asme-SA-105</u>
b. Bar Stock and Forgings		
Support Rods		<u>ASTM A182-73 Gr. F316</u> <u>ASME SA182 Gr. F316</u>
Nozzle	<u>N90812-31-0013</u>	<u>ASTM A182-73 Gr. F316</u> <u>ASME SA182 Gr. F316</u>
Disc Insert	<u>N91124-34-0084</u>	<u>ASTM A105-71</u> <u>ASME SA105</u>
Spring Washers <u>K57217-33-0037</u>	<u>N90089-36-0100</u> <u>N89001-39-0193</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Adjusting Bolt	<u>N90766-32-0049</u>	<u>ASTM A193-73 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Spindle <u>K57208-33-0083</u>	<u>N88895-41-0144</u>	

J. O. 12241 P.O. NO. 28V-225

MARK NO. 2055-IV 103C

VENDOR'S NAME CROSBY

Serial No. or

Material Specification:

Identification

Including Type or Grade

Spring R57217-33-0037

NX2626-0067

ASTM A552

Bolting

Other Parts such as Pilot Components

Bearing Adapter

N90087-36-0106

ASTM A193-71 Gr. B6
ASME SA193 Gr. B6

Stud

N88480-0624 thru 0629

ASTM A193 Gr. B7
ASME SA193 Gr. B7

Nut

N88481-0624 thru 0629

ASTM A194 Cl. 2H
ASME SA194 Cl. 2H

Stud

N90764-0373 thru 0384

ASTM A193 Gr. B7
ASME SA193 Gr. B7

We certify that the statements made in this report are correct.

Date 2-15 19 77 Signed Crosby Valve & Gage Co. By [Signature]
Manufacturer QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on 2-15 19 77 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2/15 19 77 [Signature] Commissions Perm. WC-2153
(Inspector) MM 1209
National Board, State, Provincial and Local

* corrected 11 Dec 03

Q.C.-44C-1

Sheet 1 of 2

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES

As required by the Provisions of the ASME Code Rules

DATA REPORT

1. Manufactured By Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
Name and Address
Model No. HA 65 FN Order No. U713050000 Contract Date 5/28/03 National Board No. ---

2. Manufactured For FIRST ENERGY CORP. Order No. 7125633
Name and Address

3. Owner FIRST ENERGY CORP., SHIPPINGPORT, PA
Name and Address

4. Location of Plant BEAVER VALLEY, SHIPPINGPORT, PA

5. Valve Identification SPARE Serial No. N57636-00-0018 Drawing No. DS-C-57636 REV. F
Type SAFETY Orifice Size 4.513 Pipe Size --- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch
6. Set Pressure (PSIG) 1095 557 ° F
Rated Temperature
Stamped Capacity 826132 @ 3 % Overpressure 5% Blowdown (psig) 55
Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ---

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 2 Edition 1971 Addenda Date SUMMER 1973 Case No. 1574

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	<u>N90810-34-0020</u>	<u>ASTM A105</u>
Bonnet	<u>N90813-33-0018</u>	<u>ASTM A105</u>
b. Bar Stock and Forgings		
Support Rods	<u>---</u>	<u>---</u>
Nozzle	<u>N90812-37-0020</u>	<u>ASTM A182 F316</u>
Disc	<u>N91124-77-0412</u>	<u>ASTM A182 F316</u>
	<u>N90089-51-0154</u>	<u>ASTM A105</u>
Spring Washers	<u>N89001-64-0299</u>	<u>ASTM A105</u>
Adjusting Bolt	* <u>N90766-43-0125</u> ^{44-0128 JC} _{11 Dec 03}	<u>ASTM A193 B6</u>
Spindle	<u>N88895-69-0404</u>	<u>ASTM A193 B6</u>

	Serial No. Identification	Material Specification Including Type or Grade
c. Spring	NX2626-0139	ASTM A689
d. Bolting	---	---
e. Other Parts such as Pilot Components		
BEARING ADAPTER	N90087-54-0409	ASTM A193 B6
BONNET STUD	N88480 - NE53	ASTM A193 GR B7
BONNET NUT	N88481 - DHJ4	ASTM A194 CL 2H
INLET STUD	N90764 - J45-2	ASTM A193 GR B7

We certify that the statements made in this report are correct.

Date 5-Dec 20 03 Signed Anderson Greenwood Crosby
Wrentham, MA By [Signature]
 Manufacturer * [Signature] 12/11/2003

Certificate of Authorization No. N-1878 Expires Sep. 30, 2004
 Date

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MASS and employed by

ABS Group Inc., Houston, Texas

have inspected the equipment described in this Data Report on

11-17-2003 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date DEC 5, 2003 * [Signature] 12-11-03

[Signature] Commissions MA-1420-N
 (Inspector) (National Board, State, Province and No.)

Form No. 1767

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/04/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200016316
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Construction Service Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date
4. Identification of System Main Steam (Class 2)
5. (a) Applicable Construction Code Section III 1971 Edition, S'73 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Crosby Valve	N57636-00-0012	745	2MSS-SV104C	1977	Removed	Yes
Safety Valve	Anderson Greenwood Crosby	N57636-00-0017	N/A	2MSS-SV104C	2003	Installed	Yes
Plug	Energy & Process	N/A	N/A	Lot #9428	2006	Installed	No

7. Description of Work Replaced valve, inlet flange nuts, and installed a drain plug.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replacement 1-3/8" Nuts: P.O. 45136785 / Ht. #P366.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 22, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, P 12384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-1, 20 06

CROSBY**CROSBY VALVE & GAGE COMPANY**
WRENTHAM, MASSFORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, Mass. 02093
HA-65- Name and Address
Model No. FN Order No. N41990 Contract Date 1/16/74 National Board No. 745

2. Manufactured For Stone & Webster Engineering Corp. Order No. 2BV-225
Name and Address

3. Owner Duquesne Light Co., Shippingport, Pennsylvania
Name and Address

4. Location of Plant Beaver Valley Power Station, Shippingport, Pennsylvania

5. Valve Identification 2MSS-SV104C Serial No. N57636-00-0012 Drawing No. DS-C-57636 Rev. D

Type Safety Orifice Size R Pipe Size -- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch

6. Set Pressure (PSIG) 1110 561⁰ F
Rated Temperature

Stamped Capacity 837303 3 % Overpressure 5% Blowdown (PSIG) 56

Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ----

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 2 Edition 1971, Addenda Date Summer 1973, Case No. 1574

Pressure Containing or Pressure Retaining Components**Forgings**
a. ~~XXXXXX~~**Serial No.**
Identification**Material Specification**
Including Type or Grade

Body

N90810-31-0005ASTM A105-73
ASME SA105

Bonnet

N90813-31-0013ASTM A105-73
ASME SA105**b. Bar Stock and Forgings**

Support Rods

N90812-31-0015ASTM A182-73 Gr. F316
ASME SA182 Gr. F316

Nozzle

Disc Insert

N91124-34-0088ASTM A182-73 Gr. F316
ASME SA182 Gr. F316Spring Washers K57217-33-0029N90089-36-0094
N89001-39-0203ASTM A105-71
ASME SA105

Adjusting Bolt

N90766-32-0050ASTM A193-71 Gr. B6
ASME SA193 Gr. B6Spindle K57208-33-0081N88895-41-0146ASTM A193-73 Gr. B6
ASME SA193 Gr. B6

I. O. 12241 P.O. NO.

MARK NO.

VENDOR'S NAME

Material Specification

Including Type or Grade

c. Spring K57217-33-0029

Serial No. or

Identification

NX2626-0077

ASTM A552

d. Bolting

e. Other Parts such as Pilot Components

Bearing Adapter

N90087-34-0082

ASTM A193-71 Gr. B6

ASME SA193 Gr. B6

Stud

N88480-0642 thru 0647

ASTM A193 Gr. B7

ASME SA193 Gr. B7

Nut

N88481-0642 thru 0647

ASTM A194 Cl. 2H

ASME SA194 Cl. 2H

Stud

N90764-0409 thru 0420

ASTM A193 Gr. B7

ASME SA193 Gr. B7

We certify that the statements made in this report are correct.

Date 2-15 19 77 Signed Crosby Valve & Gage Co.

Manufacturer

By

QA Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on 2-15 1977 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date

19 77

Inspector

Commission

National Board State Provincial No.

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

DATA REPORT

1. Manufactured By Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
Name and Address
Model No. HA 65 FN Order No. U713050000 Contract Date 5/28/03 National Board No. ---

2. Manufactured For FIRST ENERGY CORP. Order No. 7125633
Name and Address

3. Owner FIRST ENERGY CORP., SHIPPINGPORT, PA
Name and Address

4. Location of Plant BEAVER VALLEY, SHIPPINGPORT, PA

5. Valve Identification SPARE Serial No. N57636-00-0017 Drawing No. DS-C-57636 REV. F
Type SAFETY Orifice Size 4.513 Pipe Size --- Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch
6. Set Pressure (PSIG) 1110 559 ° F
Rated Temperature
Stamped Capacity 837303 @ 3 % Overpressure 5% Blowdown (psig) 57
Hydrostatic Test (PSIG) Inlet 1800 Complete Valve ---

7. The material, design, construction and workmanship comply with ASME Code, Section III.
Class 2 Edition 1971 Addenda Date SUMMER 1973 Case No. 1574

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	<u>N90810-34-0021</u>	<u>ASTM A105</u>
Bonnet	<u>N90813-33-0017</u>	<u>ASTM A105</u>
b. Bar Stock and Forgings		
Support Rods	<u>---</u>	<u>---</u>
Nozzle	<u>N90812-37-0021</u>	<u>ASTM A182 F316</u>
Disc	<u>N91124-77-0410</u>	<u>ASTM A182 F316</u>
	<u>N90089-51-0152</u>	<u>ASTM A105</u>
Spring Washers	<u>N89001-64-0298</u>	<u>ASTM A105</u>
Adjusting Bolt	<u>N90766-43-0124</u>	<u>ASTM A193 B6</u>
Spindle	<u>N88895-69-0403</u>	<u>ASTM A193 B6</u>

	Serial No. Identification	Material Specification Including Type or Grade
c. Spring	NX2626-0138	ASTM A689
d. Bolting	---	---
e. Other Parts such as Pilot Components		
BEARING ADAPTER	N90087-56-0425	ASTM A193 B6
BONNET STUD	N88480 - NE53	ASTM A193 GR B7
BONNET NUT	N88481 - DHJ4	ASTM A194 CL 2H
INLET STUD	N90764 - J45-1	ASTM A193 GR B7

We certify that the statements made in this report are correct.

Date 5-DEC 20 03 Signed Anderson Greenwood Crosby By Opf. A. Or
Wrentham, MA
Manufacturer

Certificate of Authorization No. N-1878 Expires Sep. 30, 2004
Date

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MASS and employed by

ABS Group Inc., Houston, Texas

have inspected the equipment described in this Data Report on

11-17-2003 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date DEC 8, 2003

[Signature]
(Inspector)

Commissions

MA-1420-N
(National Board, State, Province and No.)

Form No. 1810

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner First Energy Date 9/28/05(2)
(NAME)

(ADDRESS)
- Sheet 1 of 1
2. Plant Beaver Valley Power Station Unit No. 2
(NAME)
Shippingport, PA 15077 ECP-03-0061-02
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date N/A
4. Identification of System Service Water (Code Class 3)
5. (a) Applicable Construction Code ASME Section III 1971 Edition, Winter '72 Addenda, _____
 Code Case
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
- (c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipe	N/A	N/A	N/A	2-SWS-002-755-3	2005	Installed	No
Pipe	N/A	N/A	N/A	2-SWS-002-760-3	2005	Installed	No
Pipe	N/A	N/A	N/A	2-SWS-150-968-3	2005	Installed	No
Pipe	N/A	N/A	N/A	2-SWS-150-969-3	2005	Installed	No

7. Description of Work Replace SWS piping for 2CHS-E25B,"B" CHS Pump lube oil cooler per
ECP-03-0061-02. This ECP replaced Carbon steel piping with corrosion
resistant AL6XN piping and fittings; also replaced carbon steel vent and drain valves with stainless steel
valves.

8. Tests Conducted: Hydrostatic* ☒ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure 165 psi Test Temp. Ambient °F
*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed

Sanjib K. Mukherjee

Date

9/28

2005

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB-CT of

Hartford, Connecticut

have inspected the components described in this

Owner's Report during the period

4-27-05

to

10-28-05

, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zyzanski
Inspector's Signature

Commissions

I.N. PA2384
National Board, State, Province, and Endorsements

Date

10-28-

, 2005

Form No. 1815

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/23/06
(NAME)
76 South Main Street - Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200105607
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Fuel Pool Cooling and Purification

5. (a) Applicable Construction Code ASME III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Walworth	A1091	1082	2FNC-109	1978	Corrected	Yes
Studs, 5/8"-11	NOVA Machine	N/A	N/A	S204	2004	Installed	No
Nuts, 5/8"-11	NOVA Machine	N/A	N/A	B439	2001	Installed	No

7. Description of Work Replaced 5/8"-11 Body to Bonnet Studs and Nuts

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks: Previous NIS-2 Data Report: 1317, 1466. Manufacturer's Data Reported Attached to 1317
Applicable Manufacturer's Data Reports to be attached
5/8"-11 Studs PO # 47055279 5/8"-11 Nuts PO# 104336-143

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date October 28, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 10-28-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB9428 ANIB P+2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-28-, 20 06

Form No. 1823

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/10/06
(NAME)
76 South Main Street - Akron, OH 44308 Sheet 1 of 6
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200109376
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS-Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Service Water (Class 3)

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pump	Byron-Jackson	731-N-0027	N/A	2SWS-P21A	1982	Corrected	Yes
Bowl Assembly	BW/IP	217885	N/A	901-W-0207	1991	Installed	Yes
Pump Column	Penn Iron Works	10-1	407	Item 23	2002	Installed	Yes
Pump Column	Penn Iron Works	10-2	408	Item 23	2002	Installed	Yes
Pump Column	Penn Iron Works	10-4	410	Item 23	2002	Installed	Yes
Bottom Column	Penn Iron Works	30-1	411	Item 22	2002	Installed	Yes
Middle Column	Penn Iron Works	20-1	406	Item 24	2002	Installed	Yes

7. Description of Work Replaced bowl assembly, columns, and studs/nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. Previous NIS-2 Data Report Nos: 397 and 141. Bowl
Applicable Manufacturer's Data Reports to be attached
Assembly consists of top case, series case, suction bell and adapter column. Replacement 7/8".
Nuts: P.O. 47051976 / Ht. #QJR, P.O. 104336-25 / Ht. #8077124-MTX, P.O. 104336-189 / Ht.
#QJS, P.O. 47051975 / Ht. #P170; Studs: P.O. 47063236 / Ht. #P404, P.O. 47045137 / Ht. #P106,
P.O. 104336-244 / Ht. # F178. Replacement 1-3/4" Studs: P.O. 45137621 / Ht. #P408, 1-1/4" Nuts:
P.O. 47048563 / Ht. #14826(A201), P.O. D149199-316 / Ht. #68395, 1-1/4" Studs: P.O. 45107523 /
Ht. #224781-J662

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date December 13, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB9428 ANIB PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-14- 20 06

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by EW/TP INTERNATIONAL INC., PUMP DIV., LOS ANGELES OPERATIONS
2300 EAST VERNON AVE., VERNON, CALIFORNIA 90058
(name and address of NPT Certificate Holder)

2. Manufactured for DUQUESNE LIGHT COMPANY
ONE OXFORD CENTRE, 301 GRANT STREET, PITTSBURGH, PA 15279
(name and address of Purchaser)

3. Location of installation BEAVER VALLEY POWER STATION - UNIT 2, DUQUESNE LIGHT COMPANY
SOUTH BANK OF THE OHIO RIVER, SHIPPINGPORT, PA 15077 25 MILES NW OF PITTSBURGH, PA
(name and address)

4. Type: 1001171 REV. 0 SA-216 GR. FCB 70,000 PSI MIN. N/A 1991
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 1971 WINTER 1972 3 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)

7. Remarks: EW/TP JOB NO. - 901-W-0207 NOMENCLATURE - 32X24 2-STAGE BOWL ASSEMBLY

8. Nom. thickness (in.) .625 Min. design thickness (in.) .433 O.D. Dia. 3'0" (ft & in.) Length overall (ft & in.) 6'6.937"

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 217885	N/A
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 150 psi. Temp. 100 °F. Hydro. test pressure 225 PSI/34 at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. 217885 through N/A

CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. no. N/A
(when applicable)Design report* certified by N/A P.E. State N/A Reg. no. N/A
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this ~~(XXXX)~~ BOWL ASSEMBLY
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1131 Expires JUNE 10, 1993Date 9-30-91 Name BB/IP INTERNATIONAL INC. Signed [Signature]
(NPT Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of
CALIFORNIA and employed by ARCHRIGHT MUTUAL INS. CO. FACTORY MUTUAL SYSTEM
of NORWOOD, MASS. have inspected these items described in this Data Report on SEPT. 30, 1991, and state that to the

best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or
loss of any kind arising from or connected with this inspection.

Date 9/30/91 Signed [Signature] Commissions 1275 CA, WCO 2380 RA
(Authorized Inspector) (Nat'l Bd. Incl. endorsements) and state or prov. and No.)

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Div. 1

1. Manufactured by BYRON JACKSON Pump Div. 2300 E. VERNON AVE. VERNON, CALIF. 90053
(Name and Address of N Certificate Holder)
2. Manufactured for STONE AND WEBSTER ENG. CORP. BOSTON MASS. 02107
(Name and Address of Purchaser or Owner)
- * 3. Location of Installation BEAVER VALLEY POWER STATION, PITTSBURGH, PENNSYLVANIA
(Name and Address)
4. Pump or Valve Pump Nominal Inlet Size N/A (inch) Outlet Size 24 (inch)

	(a) Model No., Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Std. No.	(g) Year Built
(1)	<u>36RXM</u>	<u>731-N-0027</u>	<u>N/A</u>	<u>1F-7511</u>	<u>3</u>	<u>N/A</u>	<u>1982</u>
(2)	<u>2 STG. VCT.</u>			<u>REV. D</u>			
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. SERVICE WATER PUMPS FOR COMPONENT/SYSTEM COOLING.
(Brief description of service for which equipment was designed)

6. Design Conditions 130 (Pressure) psi 100 (Temperature) °F or Valve Pressure Class N/A (1)
7. Cold Working Pressure N/A psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
<u>TOP CASE</u>	<u>SA-216 GR. WCB</u>		<u>R/S 162885</u>
<u>SERIES CASE</u>	<u>SA-216 GR. WCB</u>		<u>R/S 162882</u>
<u>SUCTION BELL</u>	<u>SA-216 GR. WCB</u>		<u>R/S 154430</u>
<u>STUFF BOX</u>	<u>SA-216 GR. WCB</u>		<u>R/S 47179A</u>
(b) Forgings			
<u>HALE COUPLING</u>	<u>SA-105 GR. 2</u>		<u>R/S 48969</u>

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in Items 1, 2 and 6 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
STUDS	SA-193 GR. B7		RIS 115041
Hex. Hd. Cap Scr.	SA-193 GR. B7		RIS 115037
Hex. Nut	SA-194 GR. 7		RIS 97736
(d) Other Parts			
Col. Flange	SA-515 GR. 70		RIS 47948
Elbow Pipe	SA-515 GR. 70		RIS 158389
Throttle Support	SA-515 GR. 70		RIS 158690
Support Pipe	SA-106 GR. B		RIS 158885
Upper Flange	SA-515 GR. 70		RIS 158641
Lower Flange	SA-515 GR. 70		RIS 158641
Col. Pipe	SA-515 GR. 70		RIS 158871
Col. Pipe	SA-515 GR. 70		RIS 158870
Col. Pipe	SA-515 GR. 70		RIS 158869

9. Hydrostatic test 200 psi. Disk Differential test pressure NIA psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1971.

Addenda WINTER 1972 (Date), Code Case No. N-146-1, Date 1 Oct. 1982.

Signed Byron Jackson Pump Div. by C.W. Hume
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1130 to use the N (N) symbol expires 16 JUNE 1984 (Date)

CERTIFICATION OF DESIGN

Design information on file at Byron Jackson Pump Div.
Stress analysis report (Class 1 only) on file at NIA

Design specifications certified by (1) STEPHEN A. SHUMAN

PE State Pennsylvania Reg. No. PE-30264-E

Stress analysis certified by (1) NIA

PE State NIA Reg. No. NIA

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by ABO MFG. MUTUAL INS. Co. of WALTHAM, MASS. have inspected the pump, or valve, described in this Data Report on Oct. 1st 19 82 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date October 1st 19 82

Mahmud N. Contractor
(Inspector)

Commissions Calif-1408 Penn-WC 2457
(Nat'l Bd., State, Prov. and No.)

CERTIFICATE OF AUTHORIZATION NO. N-1130
 EXPIRES: 16 JUNE 1984
 BY: C.W. Hume (QA MGR. SJ)
 ANI: 11/1/83 DATE: 2-7-83

* CORRECTED COPY

ER/12/14/06
SC 12/14/06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Penn Iron Works, Inc, 700 Old Fritztown Road, Sinking Spring, PA 19808
(name and address of RPT Certificate Holder)
2. Manufactured for Flowserve Pump Corp., 2300 East Vernon Avenue, Vernon, CA 900580017
(name and address of purchaser)
3. Location of installation Unknown
(name and address)
4. Type 313208, Rev. D SA-515, 70 70 ksi Min. NA 2002
(drawing no.) (matl. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division I: 1971 Winter 1972 3 NA
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA
(no.)
7. Remarks: * Penn Iron Works, Inc. not responsible for design
8. Nom. thickness (in.) 0.380" Min. design thickness (in.) Unknown Dia. ID (ft & in.) 2 Length overall (ft & in.) 6'-11"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 20-1	408	(28)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure Unknown psi. Temp. Unknown °F. Hydro. test pressure 232 psi at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial Nos. 20-1 through 20-1

CERTIFICATION OF DESIGN

Design specifications certified by NA P.E. State NA Reg. no. NA
(when applicable)
Design report* certified by NA P.E. State NA Reg. no. NA
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) * Middle Column SL 12/14/06
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2927 Expires August 28, 2002
Date 12/14/06 Name Penn Iron Works, Inc. Signed Earl R. Vetter
(NPT Certificate Holder) (Authorized Representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of HARTFORD, CT have inspected these items described in this Data Report on 8-22-02, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/14/06 Signed Scott R. J. Day Commissions NB 9364 (N) PA 2372
(Authorized Inspector) (Natl. Bd. and state or prov. and no.)

K CORRECTED COPY
EAT 12/14/02
SC 12/14/06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Penn Iron Works, Inc, 700 Old Fritztown Road, Sinking Spring, PA 19808
(name and address of NPT Certificate Holder)
2. Manufactured for Flowserve Pump Corp., 2300 East Vernon Avenue, Vernon, CA 900580017
(name and address of purchaser)
3. Location of installation Unknown
(name and address)
4. Type 312363, Rev. G SA-515, 70 70 ksi Min. NA 2002
(drawing no.) (part spec. no.) (tensile strength) (CRM) (year built)
5. ASME Code, Section III, Division 1: 1971 Winter 1972 3 NA
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA
(no.)
7. Remarks * Penn Iron Works, Inc. not responsible for design

8. Nom. thickness (in.) 0.380" Min. design thickness (in.) Unknown Dia. ID (ft & in.) 2' Length overall (ft & in.) 6'-11"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) <u>30-1</u>	<u>411</u>	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure Unknown psi Temp. Unknown °F Hydro. test pressure 232 psi at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial Nos. 30-1 through 30-1

CERTIFICATION OF DESIGN

Design specifications certified by NA P.E. State NA Reg. no. NA
(when applicable)
Design report* certified by NA P.E. State NA Reg. no. NA
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) * Bottom Column conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2927Expires August 28, 2002

Date 12/14/06 Name Penn Iron Works, Inc. Signed Earl R. Pickett
(NPT Certificate Holder) (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CF of HARTFORD, CT. have inspected these items described in this Data Report on 8-22-02 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/14/06 Signed Scott R. Juley Commissions NB 9364 (N) PA2372
(Authorized Boiler Inspector) (Nat'l Bd. (incl. endorsement) and state or prov. and no.)

* CORRECTED COPY

EP 12/14/06
SC 12/14/06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

**As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production**

Pg. 1 of 2

1. Manufactured and certified by Penn Iron Works, Inc, 700 Old Fritztown Road, Sinking Spring, PA 19808
(name and address of NPT Certificate Holder)
2. Manufactured for Flowserve Pump Corp., 2300 East Vernon Avenue, Vernon, CA 900580017
(name and address of purchaser)
3. Location of Installation Unknown
(name and address)
4. Type 313207, Rev. C SA-515, 70 70 ksi Min. NA 2002
(drawing no.) (mat'l. spec. no.) (design strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Winter 1972 3 NA
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA
(no.)
7. Remarks: * Penn Iron Works, Inc. not responsible for design

8. Nom. thickness (in.) 0.380" Min. design thickness (in.) Unknown Dia. ID (ft & in.) 2' Length overall (ft & in.) 6'-11"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) 10-1	407	(26)	
(2) 10-2	408	(27)	
(3) 10-3	409	(28)	
(4) 10-4	410	(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure Unknown psi. Temp. Unknown °F. Hydro. test pressure 232 psi at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Certificate Holder's Serial Nos. 10-1 through 10-4

CERTIFICATION OF DESIGN

Design specifications certified by NA P.E. State NA Reg. no. NA
(when applicable)
Design report* certified by NA P.E. State NA Reg. no. NA
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) * Columns SC 12/14/06
BR 12/14/06
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2827Expires August 28, 2002

Date 12/14/06 Name Penn Iron Works, Inc. Signed [Signature]
(NPT Certificate Holder) (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSA CF of HARTFORD, CT have inspected these items described in this Data Report on 8-22-02, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12/14/06 Signed [Signature] Commissions NR 9364(N) PA 2372
(Authorized Nuclear Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

Form No. 1841

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/19/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200136803
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Primary Component Cooling (Class 2)

5. (a) Applicable Construction Code ASME III 1974 Edition, S75 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Expansion Joint	Pathway Bellows Inc	D-5-3213-N2-1132	N/A	2CCP-EJM214B	1978	Corrected	Yes

7. Description of Work Rewelded clip to flange.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report Nos: 72, 76, and 939. Manufacturer's Data Report Attached

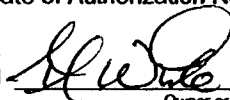
Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed



Owner or Owner's Designee, Title

Senior Specialist

Date

October 25, 20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT

have inspected the components described in this Owner's Report during the period 4-27-05 to 10-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date 10-27-, 20 06

FORM 1-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provisions of the ASME Code Rules, Sect. III, Div. 1

1. (a) Manufactured by Pathway Bellows Inc., P.O. Box 1526, El Cajon, California 92022
(Name and address of Manufacturer of part)
- (b) Manufactured for Duquesne Light Co., Stone & Webster Engr. Corp.-Agent, P.O. Box 186
(Name and address of Manufacturer of completed nuclear component)
2. Identification-Manufacturer's Serial No. of Part D-5-3213-N2-1132 Nat'l Bd. No. --- Shippingport, PA 15077
- (a) Constructed According to Drawing No. D-5-3213 Rev.B Drawing Prepared by Pathway Bellows Inc.
- (b) Description of Part Inspected 12" Expansion Joint
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date Winter 1975, Case No. --- Class 3
3. Remarks: PIPING EXPANSION JOINT FOR PRIMARY COOLING WATER PUMPS FOR DUQUESNE
(Brief description of service for which component was designed)
LIGHT CO., BEAVER VALLEY POWER STATION NO. 2.

TAG NO. 2 CCP-EJM-214 B DUQUESNE LIGHT CO.
BEAVER VALLEY UNIT #2
2BV-240

We certify that the statements made in this report conform to the rules of construction of the ASME Code (The applicable Design Specification and Stress Manufacturer is responsible for furnishing a separate component Design Specification and Stress Report.)
EQUIPMENT DESCRIPTION 12" EXP. JOINT
MARK #2CCP-EJM-214 B
PATHWAY BELLOW INC. EL CAJON, CALIF.
in the Code con-
An appurtenance is not included

Date December 23 19 78 Signed Pathway Bellows Inc. By W.R. Lowe
(Manufacturer)

Certificate of Authorization Expires August 19, 1980 Certificate of Authorization No. N-1835

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at Pathway Bellows Inc., P.O. Box 1526, El Cajon, Ca. 92022

Stress analysis report on file at ----

Design specifications certified by R.E. Tschirch Prof. Eng. State MA Reg. No. 27326

Stress analysis report certified by ---- Prof. Eng. State --- Reg. No. ----

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of California and employed by Royal Indemnity Co. of New York, N.Y. have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on December 23 19 78, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date December 23 19 78

Joseph Webster
Inspector's Signature

Commissions PA WC 2372
National Board, State, Province and No.

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in item 3, "Remarks" data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3, "Remarks"

RECEIVED

JAN 21 1979

Stone & Webster

(a) Manufactured by Pathway Bellows, Inc. P.O. Box 1526, El Cajon, California 92022
(Name and address of Manufacturer of part)

(b) Manufactured for Duquesne Light Co., Stone & Webster Engr. Corp.-Agent, P.O. Box 186
(Name and address of Manufacturer of vessel) Shippingport, PA 15077

D-5-3213-N2-1132

D-5-3213 Rev. B

1978

MFG's Serial No. of Part	(CRN)	(Dwg.)				(Year Built)
Shell: 2 Ply						
Bellows	Material SA240T304	T.S. 75,000	Nom. Thk. .024	DIA. 13.250	LGTH. 7.000	
Flange	Material SA105	T.S. 70,000	Nom. Thk. .300#	DIA. 12.000	LGTH. 2.875	
	Material:	T.S.	Nom. Thk.	DIA.	LGTH.	
	Material:	T.S.	Nom. Thk.	DIA.	LGTH.	
	Material:	T.S.	Nom. Thk.	DIA.	LGTH.	
	Material:	T.S.	Nom. Thk.	DIA.	LGTH.	
	Material:	T.S.	Nom. Thk.	DIA.	LGTH.	
	Material:	T.S.	Nom. Thk.	DIA.	LGTH.	
	Material:	T.S.	Nom. Thk.	DIA.	LGTH.	

Seams: 2 Ply						
Bellows	Long B/W	H.T. N/A	X.R. NONE	Sect'd	Eff. 70%	
	Long	H.T.	X.R.	Sect'd	Eff.	
	Long	H.T.	X.R.	Sect'd	Eff.	
	Long	H.T.	X.R.	Sect'd	Eff.	
	Long	H.T.	X.R.	Sect'd	Eff.	
	Long	H.T.	X.R.	Sect'd	Eff.	
	Long	H.T.	X.R.	Sect'd	Eff.	
Band with Buckle:		H.T.	X.R.	Sect'd	Eff.	
	Grth: FULL FILLET	H.T. N/A	X.R. N/A	Sect'd	No. of Courses 3	

Design Press. 153 PSI At Max. Temp 180 Charpy Impact @ Temp OF ----

Remarks: UNIT HYDROSTATICALLY TESTED @ 230 PSIG AT AMBIENT TEMPERATURE.

EXPANSION JOINT DESIGN QUALIFIED TO ASME SECTION III, ND3549.4(e)(1).

TAG NO. 2 CCP-EJM-214 B

DUQUESNE LIGHT CO.
BEAVER VALLEY UNIT #2
2BV-240
EQUIPMENT DESCRIPTION 12" EXP. JOINT
MARK #2CCP-EJM-214 B
PATHWAY BELLOWS INC. EL CAJON, CALIF.

RECEIVED

JAN 2 1979

Stone & Webster
Engineering Corporation
Document Review

Form No. 1901 Rev. 1

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/30/2006
(NAME)
76 South Main Street -- Akron, OH 44308 Sheet 1 of 2
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200086279
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS-Valve Team Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Chemical and Volume Control (Class 2)

5. (a) Applicable Construction Code ASME Sect. III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Westinghouse	03000CS8200000 002W720162	W121096	2CHS-12	1977	Corrected	Yes
Nuts	NOVA Machine	N/A	N/A	J454	2003	Installed	No

7. Description of Work Replaced the body to bonnet nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Manufacturers Data Report attached. 5/8"-11 Nuts: P.O. #45102947.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date January 31, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NS9428ANIB PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 1-31-, 20 07

As Required by the Provisions of the 1941 Civil Control Act.

1N014
PG(4)38562-AR6-AR

- (a) Drawing No. 5059041 Prepared by J. S. Zelenak
(b) National Board No. W12096
Design Conditions 200 psi 250 °F
(Pressure) (Temperature)
The material, design, construction, and workmanship complies with ASME Code Section III, Class 1
Edition 1971, Addenda Date W72, Case No. 1553-1, 1649

[illegible]

*Supplements charts in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information in items 1, 2, 3a and 3b on this document is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

(over)

YDP-PAGE 5 CF 26

Mark No.	Material Name	Manufacturer	Quantity
(c) Bolting			
Main Flange Studs	SA 453 GR E	Mainville Mfg Co	No. 1-3591-114
Main Flange Nuts	SA 194 GR B	Valley Forge	No. 765-2
(d) Other Parts			

B. Hydrostatic test. 425 psi.

CERTIFICATION OF DESIGN

Design information on file at Westinghouse Electro-Mechanical Division
 Stress analysis report on file at Westinghouse Electro-Mechanical Division
 Design specifications certified by James C. DiPerna (I) Prof. Eng. State PA Reg. No. 15372-E
 Stress analysis report certified by Harry E. Ewinger (I) Prof. Eng. State PA Reg. No. 10729-E
 (I) Signature not required. List name only.

We certify that the statements made in this report are correct.

Date 5-4 19 77 Signed Westinghouse Electro-Mechanical Division (Manufacturer) By [Signature]

Certificate of Authorization No. 1385 expires May 14, 1979

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Pennsylvania and employed by Lumbermens Mutual Casualty Co of Long Grove, Illinois have inspected the equipment described in this Data Report on MAY 09, 1977 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date MAY 05, 1977

[Signature]
 (Inspector)

Commission NA 7783

VDP-PAGE 56 OF 56

Form No. 1904

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/18/06
(NAME)
76 South Main Street - Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200168856
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Containment Depressurization System (Class 2)
5. (a) Applicable Construction Code ASME Section III 1971 Edition, W72 Addenda, NA Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Walworth Co.	A1106	1244	2QSS-2	1980	Corrected	Yes

7. Description of Work Seal Welded the Valve Stem Leakoff Plug

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No Previous NIS-2 Code Data Report. Manufacturer's Data Report attached.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date October 28, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-1-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions SB9428 ANEB PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-1-, 20 06

4. Pump or Valve 12" H226 VGOSP Nominal Inlet Size 12" Outlet Size 12"
150# Gate Valve (Inch) (Inch)

11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533

 Chief classification of service for which equipment was designed |

- [illegible]

13-00000

Mark No.	Material Spec. No.	Manufacturer	Remarks Heat #
(c) Bolting			
Studs	SA-193, GrB8	B & G	8644067
Nuts	SA-194, Gr-8	B & G	A9368
(d) Other Parts			
Pipe Plug	SA-182, TFF 304	A.B. Murray/ Camco	MU

2. Hydrostatic test 425 psi. Disk Differential test pressure 275 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1971
Addenda Winter 1972, Code Case No. 1672 Date Jan 30, 1980
Signed Walworth Company/Aloyco Plant by Frank Truppo Manager 0-8
(N Certificate Holder) to use the N symbol expires 4-7-81
Our ASME Certificate of Authorization No. N-2076 (N) (Date)

CERTIFICATION OF DESIGN

Design information on file at Walworth Company/Aloyco Plant
Stress analysis report (Class 1 only) on file at Not required

Design specifications certified by (1) Faruk A. Gopalani
PE State PA Reg. No. 21966-E
Stress analysis certified by (1) Not required
PE State _____ Reg. No. _____

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New Jersey and employed by HSBI&I Co.
of Hartford, Conn. have inspected the pump, or valve, described in this Data Report on Jan. 30, 1980, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1-30-80 [Signature] Commissions NS 2632
(Inspector) (Natl Bd. State Prov. and Reg.)

Form No. 1914

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order Nos: 200015415, 200036098
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Maintenance & Construction Services Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Chemical and Volume Control (Class 2)
5. (a) Applicable Construction Code Section III 1971 Edition, S'72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N-416-2

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pump	Pacific Pump	49190-R	690	2CHS-P21A	1982	Corrected	Yes
Discharge Head	Flowserve Corp.	RWNA04846	N/A	Head, bypass pipe and flange	2006	Installed	Yes
Seal Housing	Flowserve Corp.	RLSA03095	N/A	N/A	2002	Installed	Yes
Seal Housing	Flowserve Corp.	----	N/A	N/A	2001	Installed	No

7. Description of Work Replaced pump discharge head and nuts, inboard & outboard seal housings,
inlet & outlet flange studs/nuts and sections of lube oil piping.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. Replaced sections of lube oil piping designed to ANSI B31.1
Applicable Manufacturer's Data Reports to be attached
1967E-S'72A. All bolting was supplied by Nova Machine to ASME Sect. III Class 1 as follows:
3/4" Nuts: P.O. 47035358 / Ht. #K456. Lot # of second seal housing was not recorded. Two were
supplied on P.O. 7046265: RLSA01241 and RLSA00943.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date January 12, 20 07
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean J. Zyzanski Commissions 1B9428 ANIB PA 2384
Inspector's Signature National Board, State, Province, and Endorsements
 Date 1-15-, 20 07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Pump Div, Nuclear Products Operations 2300 E. Vernon Ave., Vernon, CA 90058
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corp., 76 South Main Street, Akron, OH 44308
(name and address of purchaser)
3. Location of installation Beaver Valley Storeroom, Pennsylvania Power Co. Route 168, On-Site Storeroom, Shippingport, PA 15077
(name and address)
4. Type D73894 Rev. 3 SA-182 F304 75,000 PSI N/A 2006
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Summer 1972 2 N/A
(edition) (addenda data) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Flowserve Job No.: RLCA03622 Nomenclature: Discharge Head
Consisting of: Head, Mat'l type: SA-182 F304, Bypass Pipe, Mat'l type: SA-312 GR. 304L
And Bypass Flange, Mat'l type: SA-182 F304
8. Nom. thickness (in.) 4.625 Min. design thickness (in.) 4.500 Dia. ID (ft & in.) 1' 10" Length overall (ft & in.) 0'9.375"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) RWNA04846	N/A	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

Design pressure 2800 psi. Temp. 300 °F. Hydro. test pressure Disch. Side 4960, 5260 Suct. Side 375-400/77 at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.



E00040

FORM N-2 (Back — Pg 2 of 2)Certificate Holder's Serial Nos. RWNA04846 through RWNA04846

CERTIFICATION OF DESIGN

Design specifications certified by Albert John Wettlaufer P.E. State PA Reg. no. 13335-E
 (when applicable)
 Design report* certified by John R. Lightle P.E. State N/A Reg. no. N/A
 (when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Discharge Head
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1131 Expires June 10, 2008
 Date 6/23/06 Name Flowserve Pump Div., Nuclear Products Operations Signed [Signature]
 (NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province
 of California and employed by HSB-CT
 of Hartford, CT have inspected these items described in this Data Report on 6/23/06, and state that to the
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
 III, Division 1. Each part listed has been authorized for stamping on the date shown above.
 By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
 in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage
 or loss of any kind arising from or connected with this inspection.

Date 6/23/06 Signed [Signature] Commissions CA-1969
 (Authorized Nuclear Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

As Required by the Provisions of the ASME-Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by FLORENCE CORP., DOMESTIC EQUIPMENT DIVISION, 2300 EAST VERNON AVE., VERNON, CA 90058
(name and address of NPT Certificate Holder)

2. Manufactured for FIRST ENERGY, BEAVER VALLEY, SHIPPINGPORT, PA 15077
(name and address of Purchaser)

3. Location of installation FIRST ENERGY, BEAVER VALLEY, SHIPPINGPORT, PA 15077
(name and address)

4. Type: D17368-00-00-OSP-SP ASME SA-182 GR. P-304 75,000 N/A 2002
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 1971 SUMMER 1972 2 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)

DESIGNER JOB NO.: RLCA00919 NOMENCLATURE: SEAL HOUSING MAT'L. TYPE: ASME SA-182 GR. P-304

8. Nom. thickness (in.) 1.062 Min. design thickness (in.) 1.000 Dia. ID (ft & in.) 0' 3.0" Length overall (ft & in.) 0' 2.984"

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) <u>RLSA03094</u>		(26)	
(2) <u>RLSA03095</u>		(27)	
(3) <u>RLSA03091</u>		(28)	
(4) <u>RLSA03093</u>		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 220 psi. Temp. 300 °F. Hydro. test pressure 375 at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12-88) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Reprint (7/91)

Certificate Holder's Serial Nos. _____ through _____

CERTIFICATION OF DESIGN

Design specifications certified by Albert John Wettlaufer P.E. State PA Reg. no. 13335-E
(when applicable)Design report* certified by W. O. Shepherd P.E. State N/A Reg. no. N/A
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) SEAL HOUSING
conforms to the rules of construction of the ASME Code, Section III, Division 1.NPT Certificate of Authorization No. N-1131 Expires JUNE 10, 2002Date 4/26/02 Name FLOWERVE CORPORATION, ROTATING EQUIPMENT DIVISION Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA
and employed by HSB CTof HARTFORD, CT. have inspected these items described in this Data Report on 4/26/02, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 4/26/02 Signed [Signature] Commissions NB 12050-N CA-1969
(Authorized Inspector) (Nat'l. Bd. incl. endorsements and state or prov. and no.)

Form No. 1915

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/25/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 21
(ADDRESS) *dep. 10/25/06*

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200213588
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date _____

4. Identification of System Service Water (Class 3)

5. (a) Applicable Construction Code ASME III 1971 Edition, W72 Addenda, Code Case N/A
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N-416-2

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Piping	Schneider Power	2-SR-30-12-SWS	NA	2-SWS-003-612-3	1986	Removed	Yes
Piping	FENOC	N/A	N/A	2-SWS-003-612-3	2006	Installed	No

7. Description of Work Replaced pipeline 2-SWS-003-612-3

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No previous NIS-2 Data Report. No Code Data Reports available. Replaced 3" NPS:

Applicable Manufacturer's Data Reports to be attached

Pipe PO# 7099495-5, Ht. #A41671; 90° Elbow PO# 7125063, Ht. #M418A; and Flange PO#47051202, Ht. #A24.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date October 25, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 10-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions

I, N P12384
National Board, State, Province, and Endorsements

Date 10-27-, 20 06

Form No. 1927

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner First Energy Date 10/10/06
(NAME)
Shippingport, PA 15077 Sheet 1 of 1
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 2
(NAME)
Shippingport, PA 15077 Order 200213621
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date N/A
4. Identification of System Quench Spray (Class 2)

5. (a) Applicable Construction Code ASME Section III 1971 Edition, Winter '72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Piping	FENOC	N/A	N/A	2-QSS-002-217-2	2006	Installed	No
Support	FENOC	N/A	N/A	2QSS-PSR063R	2006	Corrected	No

7. Description of Work Add flange and modification of support 2QSS-PSR063R per ECP-05-0362-02.
 This ECP installs the new Containment Building Emergency Recirculation Sump Screens.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 (22) Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Open ended system, exempt from pressure testing per IWC-5222(d).

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed William Volitch Date 11-21-06, 20
Owner or Owner's Designee, Title
WILLIAM VOLITCH

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB-CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Lynch Commissions I, N, P 12384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-14-, 20 06

Form No. 1930

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/14/06
(NAME)
- 76 South Main Street - Akron, OH 44308 Sheet 1 of 3
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
- Shippingport, PA 15077 Work Order Nos 200018129, 200016616
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance & Construction Services Type Code Symbol Stamp N/A
(NAME)
- Shippingport, PA 15077 Authorization No. N/A
(ADDRESS)
- Expiration Date *
4. Identification of System Chemical and Volume Control (Class 2)
5. (a) Applicable Construction Code Section III 1971 Edition, S'72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N-416-2

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pump	Pacific Pump	53883	638	2CHS-P21B	1982	Corrected	Yes
Discharge Head	Flowserve	RLSA04373	N/A	Head, bypass pipe and flange	2003	Installed	Yes
Seal Housing	Flowserve	RLSA03092	N/A	N/A	2002	Installed	Yes
Seal Housing	Flowserve	RLSA00943	N/A	N/A	2001	Installed	No

7. Description of Work Replaced pump discharge head and nuts, inboard & outboard seal housings,
inlet & outlet flange studs/nuts and sections of lube oil piping.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. Replaced sections of lube oil piping designed to ANSI B31.1
Applicable Manufacturer's Data Reports to be attached

1967E-S'72A. All bolting was supplied by Nova Machine to ASME Sect. III Class 1 as follows:

3/4" Studs: P.O. 47048563 / Ht. #M794; 3/4" Nuts: P.O. 47042699 / Ht. #K553, P.O. 47082641 / Ht. :

#R512; 5/8" Studs: P.O. 45106298 / Ht. #H633, 5/8" Nuts: P.O. 47082958 / Ht. #P914; 1-3/4" Nuts:

P.O. 7081202 / Ht. #C888, 1-3/4" Studs: P.O. 45104515 / Ht. #J557.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date

N/A

Signed



Senior Specialist

Date

January 16

20 07

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period

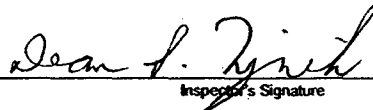
4-27-05

to

11-11-06

and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.


 Inspector's Signature

Commissions

NB9428ANEB PA2384
 National Board, State, Province, and Endorsements

Date

1-16-

20

07

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

**As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production**

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corp., 2300 E. Vernon Ave., Vernon, CA 90058
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corp., PO Box 3611, Akron, Ohio 44309
(name and address of Purchaser)
3. Location of installation First Energy Corp., Long Term Storage Facility, Shippingport, PA 15077
(name and address)
4. Type: D73894 Rev. 03 ASME SA 182 F304 75 KSI Min. NA 2003
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 Summer 72 2 NA
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA
(no.)
7. Remarks: Nomenclature: Assembly, Discharge Head, Consisting of:
Head-SA 182 F304, Bypass Pipe-SA 312 304L, Bypass Flange-SA 182 F304

8. Nom. thickness (in.) 4.625" Min. design thickness (in.) 4.500" Dia. ID (ft & in.) 1', 10" Length overall (ft & in.) 0', 9.375"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) <u>RLSA04373</u>	<u>NA</u>	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2800 psi. Temp. 300 °F. Hydro. test pressure Disch. 5150, Suct. 400@ 70 at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Reprint (7/91)

Certificate Holder's Serial Nos. RLSA04373 through NA

CERTIFICATION OF DESIGN

Design specifications certified by Albert John Wettlaufer P.E. State PA Reg. no. 13335-E
(when applicable)

Design report* certified by John R. Lighle P.E. State NA Reg. no. NA
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assembly, Discharge Head
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1131 Expires June 10, 2005

Date 7/18/03 Name Flowserve Corp., Pump Division Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of California and employed by HSB-CT
of Hartford, CT have inspected these items described in this Data Report on 7/18/03, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 7/18/03 Signed [Signature] Commissions CA1969
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

**As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production**

Pg. 1 of 2

1. Manufactured and certified by FLOWSERVE CORP., ROTATING EQUIPMENT DIVISION, 2300 EAST VERNON AVE., VERNON, CA 90058
(name and address of NPT Certificate Holder)
2. Manufactured for FIRST ENERGY BEAVER VALLEY, SHIPPINGPORT, PA 15077
(name and address of Purchaser)
3. Location of installation FIRST ENERGY, BEAVER VALLEY, SHIPPINGPORT, PA 15077
(name and address)
4. Type: D17368-00-00-OSP-SP ASME SA-182 GR. F-304 75,000 N/A 2002
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 SUMMER 1972 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: FLOWSERVE JOB NO.: RLCA00920 NOMENCLATURE: SEAL HOUSING MAT'L. TYPE: ASME SA-182 GR. F-304

8. Nom. thickness (in.) 1.062 Min. design thickness (in.) 1.000 Dia. ID (ft & in.) 0' 3.0" Length overall (ft & in.) 0' 2.984"
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) <u>RLSA03092</u>		(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 220 psi. Temp. 300 °F. Hydro. test pressure 375 at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Reprint (7/91)

Certificate Holder's Serial Nos. _____ through _____

CERTIFICATION OF DESIGN

Design specifications certified by Albert John Wettlaufer P.E. State PA Reg. no. 13335-E
(when applicable)Design report* certified by W. O. Shepherd P.E. State N/A Reg. no. N/A
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) SEAL HOUSING
conforms to the rules of construction of the ASME Code, Section III, Division 1.NPT Certificate of Authorization No. N-1131 Expires JUNE 10, 2002Date 4/26/02 Name FLORSERVE CORPORATION, ROTATING EQUIPMENT DIVISION Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by HSB CT of HARTFORD, CT have inspected these items described in this Data Report on 4/26/02, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 4/26/02 Signed [Signature] Commissions NB 12050-N CA-1969
(Authorized Inspector) (Nat'l Bd. incl. endorsements, and state or prov. and no.)

Form No. 1931

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/09/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order 200158719
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS-Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Main Steam (Class 2)

5. (a) Applicable Construction Code Section III 1977 Edition, S'79 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Atwood & Morrill	1-15579-03	N/A	2MSS-AOV101A	1987	Corrected	Yes
Pilot Poppet	Weir Valve	3	N/A	Ht. #73130	2003	Installed	Yes

7. Description of Work Replaced Pilot Poppet/stem assembly and stellite hardfacing in areas of body.
Stellite hardfacing on the main Poppet was also replaced.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Reports attached. The stellite welding on the valve body was done by
Applicable Manufacturer's Data Reports to be attached
Continental VR-Tesco. The main poppet (S/N-1, Ht. #6068460) was repaired by Weir Valve under
P.O. 55105736 by having the stellite replaced.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 21, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions IN, PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-22-, 20 06

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

**Corrected Copy As Required by the Provisions of the ASME Code, Section III, Div. 1

1. Manufactured by Atwood & Morrill Co., Inc., 285 Canal Street, Salem, MA 01970
(Name and Address of N Certificate Holder)
2. Manufactured for Duquesne Light Company,* Pittsburgh, PA
(Name and Address of Purchaser or Owner)
3. Location of Installation Beaver Valley Station 2, Shippingport, PA
(Name and Address)
4. Pump or Valve Valve Nominal Inlet Size 28 Outlet Size 28
(Inch) (inch)

(a) Model No., (b) N Certificate Holder's (c) Canadian

Series No.
or TypeSerial
No.Registration
No.(d) Drawing
No.

(e) Class

(f) Nat'l.
Bd. No.(g) Year
Built

(1) 28" Main Steam 15579-03 N/A 15579-03 2 N/A 1987
(2) Isolation Valve Rev. 02
(3) _____
(4) _____
(5) *Sold to Stone & Webster Engineering Corp.
(6) _____
(7) **Pilot poppet material procured to ASME Section II, 1974 Edition
(8) with Winter 1975 Addenda. Reference A&M NCR# 32446.
(9) _____
(10) _____

5. Main Steam

(Brief description of service for which equipment was designed)

6. Design Conditions 1085 psi 560 °F or Valve Pressure Class N/A (1)
(Pressure) (Temperature)
7. Cold Working Pressure 1500 psi at 100°F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
<u>Body</u>	<u>SA 216 Gr. WCC</u>	<u>Newport News Shipbuilding</u>	<u>4276B-1</u>
(b) Forgings			
<u>Poppet</u>	<u>SA 105 O & T</u>	<u>Cann & Saul Steel</u>	<u>6068460-1</u>
<u>Cover</u>	<u>SA 105 O & T</u>	<u>Cann & Saul Steel</u>	<u>6068460-1</u>
<u>** Pilot Poppet</u>	<u>SA 182 Gr. F6a</u>	<u>Cann & Saul Steel</u>	<u>30611-1</u>

(1) For manually operated valves only

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form, and (4) each additional sheet shall be signed by the Certificate Holder and the ANI.

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
Studs	SA 540 Gr. B23 Cl. 5	Jos. Dyson & Son	Trace F1776
Nuts	SA 540 Gr. B23 Cl. 5	Jos. Dyson & Son	Trace F1773
(d) Other Parts			
N/A			

9. Hydrostatic test 2250 psi Disk Differential test pressure 1650 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1977.

Addenda Summer 1979 **, Code Case No. N/A, Date 5/1/87

Signed Atwood & Morrill Co., Inc. by Brian D. Sullivan

(IN Certificate Holder)

Our ASME Certificate of Authorization No. N2606 to use the N symbol expires 6-13-89

(N)

(Date)

CERTIFICATION OF DESIGN

Design information on file at Stone & Webster EngineeringStress analysis report (Class T only) on file at N/ADesign specifications certified by (1) Dennis Paul LeggardPE State PA Reg. No. 34173-EStress analysis certified by (1) N/APE State N/A Reg. No. N/A

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Massachusetts and employed by H.S.B. I. & I. CO.

of Hartford, CT have inspected the pump, or valve, described in this Data Report on 24 April 1987, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 01 May 1987

[Signature]
(Inspector)

Commissions NA-1222/PA-WC 2514
(Nat'l Bd. State, Prov. and No.)

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Weir Valves & Controls USA, Inc. 285 Canal Street Salem, MA 01970
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy, P.O. Box 6100, Johnstown, PA 15907-6100
(name and address of Purchaser)
3. Location of installation Beaver Valley Nuclear Power Plant, Route 16B, Shippingport PA 15077
(name and address)
4. Type: *32446-303-C Rev. 02 SA 479, S30400 88100 PSI N/A 2003
(drawing no.) (matl. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1977 S'1979 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A N/A N/A Date N/A
(no.)
7. Remarks: Cust. Item 04 WVC Item 40-3 Qty. 1 Pilot Poppet A&M P/N 32446-303-4228-000, QLA
(WVC S.O. 68311) *Dwg. Prepared by WVC. This certification meets required information of
ASME Section III 1977 Edition S'1979 Addenda.
8. Nom. Thickness (in.) 2.0 Min. design thickness (in.) 1.75 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) HT: 73130 S/N: 3	N/A
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure N/A psi Temp. N/A °F. Hydro. test pressure N/A °F
(when applicable)

*Supplemental information in the form of lists, sketches or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 2 and 3 on this Data Report is included on each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/89)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Reprint (7/81)

FORM N-2 (Back - Pg. 2 of 2)

Certificate Holders' Serial Nos. HT:73130 S/N 3 through N/A

CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. no. N/A
(when applicable)

Design report * certified by N/A P.E. State N/A Reg. no. N/A
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Pilot Poppet
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N2607 Expires 6-13-04

Date 9/25/03 Name Weir Valves & Controls USA, Inc. Signed Brian D. Sullivan
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of

MA.

And employed by

HSBCT

of Hartford, CT have inspected these items described in this Data Report on September 25, 2003, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date September 25, 2003 Signed Charles J. York Commissions No 1392
(authorized inspector) (NBPBd. (incl. Endorsements) and state or prov. and no.)

Form No. 1934

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/04/06
(NAME)
- 76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
- Shippingport, PA 15077 Work Order #200016324
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Construction Service Type Code Symbol Stamp N/A
(NAME)
- Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class 2)
5. (a) Applicable Construction Code Section III 1971 Edition, S'73 Addenda, 1574 Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Crosby Valve	N57636-00-0015	748	2MSS-SV105C	1977	Removed	Yes
Safety Valve	Crosby Valve	N57636-00-0016	1051	2MSS-SV105C	1986	Installed	Yes
Plug	Energy & Process	N/A	N/A	Lot #9428	2006	Installed	No
Disc Insert	Crosby Valve	N91124-58-0360	N/A	Ht. #85021	1985	Installed	No

7. Description of Work Replaced valve, disc insert, inlet flange nuts, and installed a drain plug.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Replacement 1-3/8" Nuts: P.O. 45136785 / Ht. #P366, P.O. 104336-72 / Ht. #96582-TTG. Replacement valve s/n N57636-00-0016 was repaired by Anderson Greenwood Crosby under P.O. 55102718 by replacing the disc insert.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date January 16, 20 07
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB9428 ANIB PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 1-16-, 20 07



CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C-1

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, MA 02093
Name and Address
- Model No. HA65FN Order No. N58432 Contract Date 4/26/85 National Board No. 1051
Duquesne Light Co., One Oxford Centre
2. Manufactured For 301 Grant St., Pittsburgh, PA 15279 Order No. C500590
Name and Address
3. Owner Duquesne Light Company - Beaver Valley Power Station - Unit #2
Name and Address
4. Location of Plant Pennsylvania
5. Valve Identification Serial No. N57636-00-0016 Drawing No. DS-C-57636 Rev. D
- Type Safety Valve Orifice Size 4.513 Pipe Size - - Inlet 6 Outlet 10
Safety, Safety Relief, Pilot, Power Actuated Inch Inch Inch Inch
6. Set Pressure (PSIG) 1125 561 F
Rated Temperature
- 848475 Lbs./Hr. Sat Stm
Stamped Capacity e 3 % Overpressure - Blowdown (PSIG) 5% of S.P.
- Hydrostatic Test (PSIG) Inlet 1800 Complete Valve - -
7. The material, design, construction and workmanship comply with ASME Code, Section III.
- Class 2 Edition 1971, Addenda Date Summer 1973, Case No. 1574

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings Forgings		
Body	<u>N90810-33-0018</u>	<u>ASTM A105</u>
Bonnet	<u>N90813-32-0016</u>	<u>ASTM A105</u>
b. Bar Stock and Forgings		
Support Rods Bearing Adapter	<u>N90087-58-0434</u>	<u>ASTM A193 B6</u>
Nozzle	<u>N90812-35-0018</u>	<u>ASTM A182 F316</u>
Disc Insert	<u>N91124-63-0375</u>	<u>ASTM A182 F316</u>
Spring Washers	<u>* See Back</u>	<u>** See Back</u>
Adjusting Bolt	<u>N90766-39-0110</u>	<u>ASTM A193 B6</u>
Spindle Assy K57208-50-0261	<u>N88895-70-0437</u>	<u>ASTM A193 B6</u>

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	* See Below	** See Below
d. Bolting		
e. Other Parts such as Pilot Components		
Spring & Washer Assy	*K57217-37-0065	
Spring Washer	*N89001-54-0271	** ASTM A105
Spring Washer Assy	*K57201-51-0150	
Spring Washer	*N90089-50-0151	** ASTM A105
Spring	*NX2626-0119	** ASTM A552
Bonnet Stud	N88480	ASTM A193 GR B7
Bonnet Nut	N88481	ASTM A194 CL 2H
Inlet Stud	N90764	ASTM A193 GR B7

We certify that the statements made in this report are correct.

Date 1-27-1986 Signed Crosby Valve & Gage Co. By L. J. Pines
 Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1986.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Arkwright-Boston Manufacturers Mutual Insurance Company have inspected the equipment described in this Data Report on JANUARY 27 19 86 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date JANUARY 27 19 86 Factory Mutual System
[Signature] (Inspector) Commissions NB 9792-N MASS 1375 PAWC 3327
 National Board, State, Province and No.)

Form No. 1935

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner FirstEnergy Nuclear Operating Company Date November 9, 2006
(NAME)
76 S. Main St. Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. Unit 2
(NAME)
Route 168, Shippingport, PA 15077 ECP 05-0355, WO# 200169234, 235, 236, 237, 240, 241
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By Westinghouse Electric Comp. Type Code Symbol Stamp N/A
(NAME)
4350 Northern Pike, Monroeville, PA 15146 Authorization No. N/A
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor Coolant System (Class 1)
5. (a) Applicable Construction Code (Vessel) Section III 1971 Edition, S 72 Addenda, 1528 Code Case
Applicable Construction Code (Piping) Section III 1971 Edition, W 72 Addenda, Code Case
- (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989 Edition, No Addenda
- (c) Applicable Section XI Code Case(s): N-504-2, N-638-1 (as modified by Relief Request BV2-PZR-01), N-416-2 (not needed)

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pressurizer Vessel	Westinghouse	1971	W18695	2RCS*PRE21	1978	Corrected	Yes
Pressurizer Piping: Spray Safety A Safety B Safety C PORV Surge	N/A	N/A	N/A	2-RCS-004-202-I 2-RCS-006-103-I 2-RCS-006-102-I 2-RCS-006-101-I 2-RCS-006-107-I 2-RCS-014-84-I	1987	Corrected	Yes
Weld Overlays: Spray Safety A Safety B Safety C PORV Surge	N/A	N/A	N/A	2RCS*PRE21- 202Z-OV-01 103C-OV-01 102B-OV-01 101A-OV-01 107Z-OV-01 84Z-OV-01	2006	Installed	No

7. Description of Work Full structural weld overlays (Alloy 52) were applied to the pressurizer spray safety, relief, and surge nozzles, extending from the low-alloy steel nozzle material to the stainless steel piping.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
(22) Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report Nos. 055 and 057. N-1 attached to 057.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/ASigned [Signature] SR. ENGINEER Date 12/12, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of

HARTFORD, CT. have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Fujish Commissions NB 9428 ANIB PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-19-, 20 06

Form No. 1936

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/25/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200020055
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date α

4. Identification of System Steam Generator Feedwater (Class 3)

5. (a) Applicable Construction Code ASME III 1977 Edition, S79 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Yarway Corp.	5492	N/A	2FWE-FCV122	1984	Corrected	Yes
Studs, 1"-8	NOVA Machine	N/A	N/A	F955	2003	Installed	No
Nuts, 1"-8	NOVA Machine	N/A	N/A	M128	2004	Installed	No
Studs, 5/8"- 11	NOVA Machine	N/A	N/A	M796	2004	Installed	No
Nuts, 5/8-11	NOVA Machine	N/A	N/A	K496	2004	Installed	No

7. Description of Work Replaced the pipe flange studs/nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No previous NIS-2 Data Report. Manufacturer's Data Report attached.

Applicable Manufacturer's Data Reports to be attached

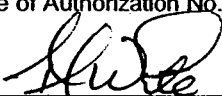
1"-8 Studs PO# 7121440, 1"-8 Nuts PO#47033238, 5/8"-11 Studs PO# 470485635/8"-11 Nuts PO# 47029219

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed

Senior Specialist

Date

October 29, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period


4-27-05

to

11-1-06

and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

I, N, PA 2384

National Board, State, Province, and Endorsements

Date

11-1-, 2006

As Required by the Provisions of the ASME Code, Section III, Div. 1

63672

4. Pump or Valve 125T322 Nominal Inlet Size 6" Outlet Size 6"
(inch) (inch)

(1)	5302(ARC)	5492	- - -	960983-01	3	- - -	1085
(2)							1989
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

*Lab. young
6/29/85
not made
ALL
6/20/85*

(Brief description of service for which equipment was designed)

7. Cor. Working Pressure 1480 psi at 100°F.

[illegible]

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-12" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
B001	SA-193 B7	VICTOR PRODUCTS CORP.	BODY/BOLTING C-2 SCREW
B113	SA-193 B7	VICTOR PRODUCTS CORP.	BODY/BV-PASS C-2 SCREW
(d) Other Parts			
4241	SA 479 GR. 410	PETER A. FRASER/ CYCLOPS	CASCADE PISTON
Q360	SA 105	MCJUNKIN CORP.	PIPE PLUG

9. Hydrotest: test 2225 psi. Disk Differential test pressure 1650 psi.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of Instruction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1977
 Addenda Summer 1979 Code Case No. Date 7/23/85
 Signed YAPWAY CORPORATION by F. W. Peszka
 (N Certificate Holder)
 Our ASME Certificate of Authorization No. N2449 to use the N symbol expires 11/14/86
 (Date)

CERTIFICATION OF DESIGN

Design information on file at STONE & WEBSTER CORPORATION
 Stress analysis report (Class 1 only) on file at STONE & WEBSTER CORPORATION

Design specifications certified by (1) JOHN F. HARKINS

PE State PA Reg. No. 30388E

Stress analysis certified by (1)

PE State Reg. No.

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PENNSYLVANIA and employed by ARMWRIGHT-BOSTON INSURANCE of NORFOLK, VA have inspected the pump, or valve, described in this Data Report on Apr 1 23 19 85, and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Form No. 1937

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/26/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200135817
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Primary Component Cooling (Class 3)

5. (a) Applicable Construction Code ASME III 1971 Edition, S72 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989

(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Walworth	D-66475	1736	2CCP-328	1978	Corrected	Yes
Studs 5/8"-11	NOVA Machine	N/A	N/A	M455	2004	Installed	No
Nuts 5/8"-11	NOVA Machine	N/A	N/A	P914	2005	Installed	No
Nuts 5/8"-11	NOVA Machine	N/A	N/A	M797	2004	Installed	No

7. Description of Work Replaced body/body studs and nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No previous NIS-2 Data Report. Manufacturer's Data Report Attached

Applicable Manufacturer's Data Reports to be attached

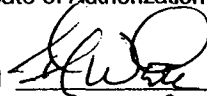
5/8"-11 Studs PO# 47039220, 5/8"-11 Nuts PO# 47082958 & 47048563.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed

Senior Specialist

Date

October 29, 20 06

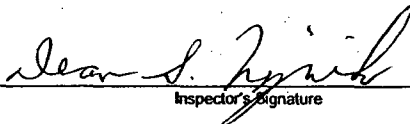
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT

have inspected the components described in this Owner's Report during the period 4-27-05 to 11-1-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

NB 9428 A NIB PA 2384
National Board, State, Province, and Endorsements

Date

11-1-, 2006

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
(As Required by the Provisions of the ASME Code, Section III, Div. 1)

1. Manufactured by Walworth Company, Greensburg Plant, Greensburg, PA. 15601
(Name and Address of Manufacturer)
2. Manufactured for Duquesne Light Company, Shippingport, PA.
(Name and Address of Purchaser or Owner)
3. Location of Installation Beaver Valley Power Station, Beaver County, Shippingport, PA.
(Name and Address)
4. Pump or Valve Valve Nominal Inlet Size 8" Outlet Size 8"
(Inch)

(a) Model No. Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Std. No.	(g) Year Built
(1) 5202 WE BE	D-66475	N/A	SK 1956-19D	3	1736	1978
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						
(9)						
(10)						

VALVE
66475
SERIAL NO.

5. Oil/Steam/Water
(Brief description of service for which equipment was designed)

6. Design Conditions 275 psi (Temperature) ANSI 150 (1)
* For Valve Pressure Class

7. Cold Working Pressure 275 psi at 100°F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Body - G183 P2	SA 216, WCB	Walworth Co.	Seal Welded Seat
Bonnet - G381 P4	SA 216, WCB	Walworth Co.	CoCrA Backseat
Wedge - G162 P3	SA 216, WCB	Walworth Co.	CoCrA Faced
(b) Forgings			
		Duquesne Light Company	
		Beaver Valley Unit No. 2	
		P. O. No. 257-73, J. G. No. 12241	
		Carroll Steel Valves - 2 1/2 in. and Larger	
		Category 1	
		Walworth Company	
		Greensburg, PA 15601	

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 3 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
Stud - V384 (R47)	SA 193 37	Haskell	
Nut - B6508 (W)	SA 194 2H	R. E. C.	
Nut - B6508 (MC)	SA 194 2H	R. E. C.	
Nut - B6508 (OT)	SA 194 2H	R. E. C.	
(d) Other Parts			
Duguesne Light Unit No. 2 Power Valve Unit No. 2 P. O. No. 40: 73, P. O. No. 12749 - Carbon Steel Valves - 2 1/2 in. and larger Category 3 Walworth Company Greensburg, PA 15601			

2. Hydrostatic test 475 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1971.
 Addenda JUNE 30, 1972 Code Case No. 1672 Date 4/26/78
 Signed Walworth Company by G. J. H. Hill
 (Manufacturer) N
 Our ASME Certificate of Authorization No. 1951 to use the symbol expires 12/9/80
 (N) (NPV) (Date)

CERTIFICATION OF DESIGN

Design information on file at Walworth Company, Greensburg, PA 15601
 Stress analysis report (Class 1 only) on file at N/A

Design specifications certified by (1) C. O. Richardson, Jr.
 PE State PA Reg. No. 016297E VALVE
 Stress analysis certified by (1) N/A
 PE State PA Reg. No. D66475
 (1) Signature not required. List name only. SERIAL NO.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by The Hartford Steam Boiler I&I Co. of Hartford, Conn. 06102 have inspected the pump, or valve, described in this Data Report on 4/26, 1978 and state that to the best of my knowledge and belief, the Manufacturer has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4/26, 1978Commission No. 108457Pa. 2220
(H&I Bd. State Prov. and N.B.)

006

Form No. 1939

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/18/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200157419
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Valve Team Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Steam Vent (Class 2)

5. (a) Applicable Construction Code ASME III 1974 Edition, S74 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Enertech	11354	N/A	2SVS-82	2005	Corrected	Yes
Studs	Nova Machine	N/A	N/A	R776	2005	Installed	No
Nuts	Nova Machine	N/A	N/A	P915	2005	Installed	No

7. Description of Work Replaced inlet/outlet flange studs and nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report Nos: 1784, 1665, 1451, 1155, 785, 555, 365, 224, and 83

Applicable Manufacturer's Data Reports to be attached

1" Studs PO# 45163728 1" Nuts PO# 47082958. Code Data Report for valve attached to 1784.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed

Senior Specialist

Date

November 4, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-7-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.


Inspector's Signature

Commissions

I.N.I. P42384
National Board, State, Province, and Endorsements

Date 11-7-, 20 06

Form No. 1942**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/25/06
(NAME)
76 South Main Street -- Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200095841
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Diesel Fuel Oil System (Class 3)
5. (a) Applicable Construction Code ASME III 1974 Edition, --- Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Fuel Oil Storage Tank	Nat'l Annealing Box	6469	2213	2EGF-TK21A	1978	Corrected	Yes
Studs	Nova Machine	N/A	N/A	P408	2004	Installed	No
Nuts	Nova Machine	N/A	N/A	A201	2004	Installed	No

7. Description of Work
- Replaced manway cover studs and nuts

8. Tests Conducted: Hydrostatic*
- ☐
- Pneumatic*
- ☐
- Nominal Operating Pressure
- ☐
- Exempt
- ☒
-
- Other
- ☐
- Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No previous NIS-2 Data Report. Code Data Report Attached.

Applicable Manufacturer's Data Reports to be attached

1 1/4"-8 Studs PO # 45137621 1 1/4"-8 Nuts PO # 47030430

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 4, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 10-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 10-27-, 20 06

1. Manufactured for National Annealing Box Co., Washington, PA
(Name and address of Manufacturer)

2. Manufactured for Duquesne Light Co., Beaver Valley Unit 2, Shippingport, PA
(Name and address of Purchaser)

3. Type HTA Vessel No. (6469) (Serial No.) Natl. Bd. No. 2213 Year built 1972
(Ident. or Vessel) (Serial No.) (State & State No.)

3a. Applicable ASME Code: Section III, Edition 1974 Addenda date —, Case No. — Class 2
SA516

4. Shell: Gr. 70 T.S. 70,000 ^{Temp.} 180/16 ^{Corr.} Allow 1/16 in. Dia. 11 in. 11-3/8 Length 72 Ft. 1-7/16 In.
(Natl. Spec. No.) (Min. thickness specified)

5. Surface: Db1. Butte, H.T. No R.T. Spot Efficiency 85 %

6. Heads: (a) Material SA516 Gr. 70 T.S. 70,000 ^{Min.} (b) Material SA516 Gr. 70 T.S. 70,000 ^{Min.}

Location (Circ. Length, mm)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Concave or Convex)
(a) Heads	<u>4034 min.</u>	<u>144"</u>	<u>8-3/4"</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>Concave</u>
	<u>O.D.</u>							

Head joints, bolts used None Other fastening —
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

Drop Weight — Hydrostatic —

Charpy impact — ft-lb — Test

7. Design Pressure 40 psi at max. temp. 50 °F. at temp. of — °F. — Press. 60 psi.

8. Safety or Relief Valve Outlets: Number — Size — Location External to vessel

9. Nozzles:

Purpose (Utility, Relief, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
<u>See Sheet 2 of 2 for nozzle information</u>							

10. Inspection Hatches, No. 1 Size 24" Location Shell at top.

Opening Hatches, No. — Size — Location —

Threaded, No. — Size — Location —

11. Supports: Skirt — Lugs — Legs — Other — Attached —
(Yes or No) (Number) (Number) (Describe) (Where & How)

12. Remarks: Purpose of Vessel Storage of fuel oil for Emergency Diesel Generator operation
Vessel No. 2EGE-TR 21A Stone & Webster P.O. 28V-54
This vessel will be supported by pouring concrete around vessel underground installation
(This is Page 1 of 2).

(Brief description of purpose of the vessel—State Contents.)

If Postweld Heat-Treated.

List oil or internal or external pressure with coincident temperature when applicable.

We certify that the statements made in this report are correct and that this nuclear vessel conforms to the rules of construction of the ASME Code, Section III.

Date 3/21/1978 Signed National Annealing Box Co.
(Manufacturer)By J. R. Frantz
J. R. ManagerCertificate of Authorization Expires August 4, 1978Certificate of Authorization No. 1177

CERTIFICATION OF DESIGN

Design information on file at National Annealing Box Co., Washington, PA

Stress analysis report on file at National Annealing Box Co., Washington, PA

Design specifications certified by Richard P. Anderson Prof. Eng. State PA Reg. No. 21602-E

Stress analysis report certified by B/A Prof. Eng. State — Reg. No. —

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY National Annealing Box Company at Washington, PA

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Pennsylvania and employed by Hartford Stn. Boiler ISI Co. Hartford, Connecticut.

have inspected the pressure vessel described in this Manufacturer's Data Report on — 19 —, and state that to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with the ASME Code Section III.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any partial or complete property damage or a loss of any kind arising from or connected with this inspection.

E. M. Frantz
Inspector's Signature

Commissions PA 21602-E PA 21602-E
National Board, State, Province and No.

Manufactured by - National Annealing Box Company, Washington, PA

Manufactured for - Duquesne Light Co., Beaver Valley Unit 2, Shippingport, PA

Type - Horiz. Vessel #6469 Natl.Bd. #2213 Yr. Built - 1978

Applicable ASME Code: Section III, Edition - 1974, Class - 3.

9. Nozzles:

Purpose (inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Tk.	Reinforcement Material	How Attached
Pump Recirc.	2	3/4"	Butt.Wld	SA106Gr.B	Sch.160	Integral	Welded
Return	1	1"	Butt.Wld	SA106Gr.B	Sch.80	Integral	Welded
Fill	1	2"	Butt.Wld	SA106Gr.B	Sch.80	Integral	Welded
Overflow	1	3"	Butt.Wld	SA106Gr.B	Sch.80	SA516 Gr.70	Welded
Level Instr. Vent	2	4"	Butt Wld	SA106Gr.B	Sch.80	SA516 Gr.70	Welded
Pump	2	14"	Butt.Wld	SA106Gr.B	Sch.80	SA516 Gr.70	Welded

Form No. 1943

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/30/06
(NAME)
76 South Main Street - Akron, OH 44308 Sheet 1 of 1
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200148267
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Service Water (Class 3)
5. (a) Applicable Construction Code ASMEIII 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A
6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Walworth Co.	A1104	N/A	2SWS-1231	1978	Corrected	Yes
Nuts	Nova Machine	N/A	N/A	F829	N/A	Installed	No
Nuts	Nova Machine	N/A	N/A	J521	N/A	Installed	No
Studs	Nova Machine	N/A	N/A	K863	N/A	Installed	No

7. Description of Work Replaced the inlet/outlet flange studs and nuts.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report No: 1444. Code Data Report attached to 1444.

Applicable Manufacturer's Data Reports to be attached

3/4" Nuts PO# 45104249, 7120115, 3/4" Studs PO# 47059254

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Spec Int Date November 4, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-7-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-7-, 20 06

Form No. 1945

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/30/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200152731
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Chemical and Volume Control System (Class 2)
5. (a) Applicable Construction Code ASME III 1971 Edition, S72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Fisher Controls	5909868	5183	2CHS-FCV122	1979	Corrected	Yes
Plug	Fisher Controls	BA4585-1	N/A	HT# 727023	2006	Installed	Yes

7. Description of Work Replaced Valve Plug

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report: 1045, 1523. Manufacturer's Data Report attachedApplicable Manufacturer's Data Reports to be attachedPlug and Stem Assembly PO# 45181680

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed

Senior Specialist

Date

October 30

, 20

06Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period

4-27-05

to

11-1-06

, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions

NB 28 AND PA 2384National Board, State, Province, and Endorsements

Date

11-1-

, 20

06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

**As Required by the Provisions of the ASME Code, Section III
Not to exceed One Day's Production**

Pg. 1 of 1

004-A20h114799

1. Manufactured and certified by FISHER CONTROLS INT'L LLC, 205 SOUTH CENTER STREET, MARSHALLTOWN, IA. 50158
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corp, PO Box 6100, Johnston, PA 15907
(name and address of purchaser)
3. Location of installation Beaver Valley Nuclear Plant, Route 168, Shippingport, PA 15077
(name and address)
4. Type I2A6576 Rev. C SA479 S31600 75 KSI N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III: 1971 Summer 1972 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Design: ASME BPVC Sec III 1971 Edition, Summer 1972 Addenda, Class 2
Other: ASME BPVC Sec III 1998 Edition, 1998 Addenda, Class 2
8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	Heat Number
(1)	BA4585-1	727023
(2)	BA4585-2	727023
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	Heat Number
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10. Design Pressure 2735 psi. Temp. 200 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM N-2 (back)

Mfr. Serial No. BA4585-1, -2

CERTIFICATION OF DESIGN

Design specifications certified by Henry P. Leonard P.E. State 23938-E Reg. no. PA
 (when applicable)

Design report* certified by N/A P.E. State N/A Reg. no. N/A
 (when applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Plug/Stem
 conforms to the rules of construction of the ASME Code, Section III.

NPT Certificate of Authorization No. 1930 Expires 10-27-2007

Date 6/14/06 Name FISHER CONTROLS INT'L LLC
 (NPT Certificate Holder)

Signed [Signature]
 (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or Province of Iowa
 and employed by Hartford Steam Boiler of CT

of Hartford, CT have inspected these items described in this Data Report on 6-14-06 and state that to the
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has
 been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report.
 Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected
 with this inspection.

Date 6-14-06 Signed [Signature] Commissions 822 IA.
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

Form No. 1946

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/23/06
(NAME)
- 76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
- Shippingport, PA 15077 200166575
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
- Shippingport, PA 15077 Authorization No. N/A
(ADDRESS)
- Expiration Date "
4. Identification of System Chemical and Volume Control System (Class 2)
5. (a) Applicable Construction Code ASME III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Crosby Valve	N56903-00-0015	191	2CHS-RV203	1976	Corrected	Yes
Studs, 5/8"-11	Nova Machine	N/A	N/A	105C	2006	Installed	No
Nuts, 5/8"-11	Nova Machine	N/A	N/A	526895-QJE	2000	Installed	No

7. Description of Work
- Replaced the inlet flange studs and nuts

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No previous NIS-2 Data Report. Manufacturer's Data Report attached

Applicable Manufacturer's Data Reports to be attached

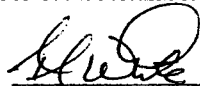
5/8"-11 Studs PO# 45183672 5/8"-11 Nuts PO# D149199-282

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed



Senior Specialist

Owner or Owner's Designee, Title

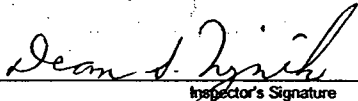
Date November 4, 20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-2-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.



Inspector's Signature

Commissions

NB9428ANIB PA2384
National Board, State, Province, and EndorsementsDate 11-7-, 20 06

5

Serial No. or

Material Specification

Identification

Including Trade or Grade

CR-24M-C032

ASTM-A618 Gr. 60

Other Part or Part of Component

None

48780

ASTM-A618 Gr. 60

ASTM-A618 Gr. 60

None

48793

ASTM-A618 Gr. 60

ASTM-A618 Gr. 60

Do certify that the statements made in this report are correct.

Date 12-19-75 Signed Crosby Valve & Case Co. By QA Manager
Manufacturer

Certificate of Authorization No. 926 expires October 25, 1977

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, being a valid commission holder by the National Board of Boiler and Pressure Vessel Inspectors and the State of MASS. and employed by Engineering Research Corporation have inspected the equipment described in this Data Report on 12-19-75 and state that in the best of my knowledge and belief the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty or provides or implies concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor the employer shall be liable in any manner for any personal injury or property damage or loss of life or limb arising from the equipment described in this report.

Date 12-19-75 By [Signature]

Inspector [Signature] Commission No. UB7325 Renewal 12-23

Arkwright-Boston Manufacturers Insurance Company - Mutual
Boiler & Machinery Division.

Form No. 1947

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/10/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order 200166403
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS-Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Reactor Coolant (Class 1)

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Crosby Valve	N56963-000-008	N/A	2RCS-RV551B	1976	Removed	Yes
Relief Valve	Crosby Valve	N56963-01-0010	N/A	2RCS-RV551B	1980	Installed	Yes

7. Description of Work Replaced valve with spare for testing purposes, and four inlet studs.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Previous NIS-2 Data Report Nos: 1659, 1204, 1197, 1157,
Applicable Manufacturer's Data Reports to be attached
847, 686, 247, 054, 045, 015, and 009. Replacement 1-3/8" Studs: P.O. 104336-195, Ht. #E382.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date

N/A

Signed



Owner or Owner's Designee, Title

Senior Spec Int

Date

November 20

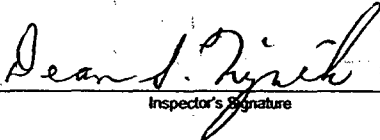
20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT

have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.


Inspector's Signature

Commissions

I.N. PA2384

National Board, State, Province, and Endorsements

Date

11-21-

20 06

CROSBYCROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

ACC 2/23/80

5 of 11

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

Q.C.-44C

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Co., 43 Kendrick St., Wrentham, MA 02093
Name and Address
HB-86-BP
Model No. Order No. N82804 Contract Date 5/24/78 National Board No.
Alabama Power Company, 600 North 18th St.
2. Manufactured For Birmingham, Alabama 35291 Order No. FNP2-765
Name and Address
3. Owner Alabama Power Company, Farley Nuclear Plant #2
Name and Address
4. Location of Plant Columbia, Alabama
1-8010-A
5. Valve Identification 6RV88LSB Serial No. N56963-01-0010 Drawing No. DS-C-56963-1 Rev. 0
Type Safety Orifice Size M₁ Pipe Size Inlet 6 Outlet 6
Safety Safety Relief Pilot Power Actuated Inch Inch Inch Inch
6. Set Pressure (PSIG) 2485 650 F
Rated Temperature
Stamped Capacity 344814 lbs/hr sat 3 % Overpressure Blowdown (PSIG) 5%
Hydrostatic Test (PSIG) Inlet 4575 Complete Valve 750

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971, Addenda Date Winter 1972, Case No. 1501
1649

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
i. Bar Stock & Forgings		
Body	<u>N90490-25-0113</u>	<u>ASME SA182 Gr. F316</u>
Bonnet	<u>N90353-48-0134</u>	<u>ASME SA105 Gr. II</u>
ii. Bar Stock and Forgings		
Disc Holder <u>K57220-56-0130</u>	<u>N90553-56-0135</u>	<u>ASTM A637-70 Gr. 718</u> <u>ASME SA637 Gr. 718</u>
NOZZLE	<u>N90556-25-0011</u>	<u>ASME SA182 Gr. F316</u>
Nozzle	<u>N90349-59-0187</u>	<u>Haynes Stellite Alloy #6B</u>
Disc Insert	<u>N90350-46-0293</u> <u>N90350-46-0294</u>	<u>ASME SA105 Gr. II</u>
Spring Washers <u>K56380-54-0147</u>	<u>N90351-33-0004</u>	<u>ASTM A193-70 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Adjusting Bolt	<u>N90354-56-0159</u>	<u>ASME SA193 Gr. B6</u> <u>ASTM A276-71 Type 440 C</u>
Spindle Point	<u>N90355-0159</u>	
<u>K56381-54-0156</u>		
Spindle Ball		

BECHTEL
412ROUTING FORM # 0009
ASME SECTION XI.

DOCUMENT

ack 2/24/80

ROUTING FORM #0000
ASME SECTION XI.
DOCUMENT
 JUL 21/88

ASME SECTION XI.
 DOCUMENT

2/25/88
 2/25/88

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring K56380-54-0147	<u>NX2761-0158</u>	<u>ASTM A304-76 Gr. 51860H</u>
d. Bolting		
e. Other Parts such as Pilot Components		
Inlet Stud	<u>N90488</u>	<u>ASME SA453 Gr. 660</u>
Inlet Nut	<u>N90489</u>	<u>ASTM A193-69 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Bonnet Stud	<u>100987</u>	<u>ASTM A453-71 Gr. 660</u> <u>ASME SA453 Gr. 660</u>
Bonnet Nut	<u>89997</u>	<u>ASTM A193-71 Gr. B6</u> <u>ASME SA193 Gr. B6</u>
Remarks: Retest due to part change of Disc Insert.		

We certify that the statements made in this report are correct.

Date 3/12 19 80 Signed Crosby Valve & Gage Co. By R. P. Casavante
 Manufacturer

Certificate of Authorization No. 1878 expires September 30, 1980

BECHTEL
 412

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on 3/18 1980 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/18 19 80 Retest John E. Morris 3/27/80
John E. Morris Commissions MASS 1266
 (Inspector) National Board, State, Province and No.

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Division.

Form No. 1950**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/01/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 3
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200156080
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Steam Generator Blowdown (Class 2)5. (a) Applicable Construction Code ASME III 1971 Edition, S73 Addenda, N/A Code Case(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Masoneilan	N-00168-3-6	N/A	2BDG-AOV102C2	1977	Corrected	Yes
Plug	Masoneilan	N/A	N/A	HT# A17159-16	1989	Installed	Yes

7. Description of Work Replaced valve plug.8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No previous NIS-2 Data Report. Manufacturer's Data Reports Attached.

Applicable Manufacturer's Data Reports to be attached

Plug PO# D045020

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 4, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-7-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-7-, 20 06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

As Required by the Provisions of the ASME Code, Section III
Not To Exceed One Day's Production

Pg. 1 of 1

1. Manufactured and certified by Masoneilan-Dresser Industries 85 Bodwell St., Avon, Ma. 02322
(Name and address of NPT Certificate Holder)
2. Manufactured for Duquesne Light Company 301 Grant St., Pittsburgh, Pa. 15279
(Name and address of purchaser)
3. Location of installation Beaver Valley Unit 2, Shippingport, Pa. 15077
(Name and address)
4. Type P9518 SA479/316 91,629 NA 1989
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III: 1971 Summer 1973 2 NA
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) NA Revision NA Date NA
(no.)
7. Remarks: Replacement For Masoneilan Valve Serial No. N00168-3

Masoneilan Part Number 011470-374-1D7

8. Nom. thickness (in.) NA Min. design thickness (in.) NA Dia. ID (ft & in.) NA Length overall (ft & in.) NA
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number HEAT NUMBER	National Board No. in Numerical Order
(1) <u>A17159-16</u>	
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure 1085 psi. Temp. 560 °F. Hydro. test pressure NA at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM N-2 (back)

Mfr. Serial No. N-360228-108

CERTIFICATION OF DESIGN

Design specifications certified by William Bohlke P.E. State Pa. Reg. no. 26027-E
(when applicable)

Design report * certified by NA P.E. State NA Reg. no. NA
(when applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) 2" Plug
 conforms to the rules of construction of the ASME Code, Section III.

NPT Certificate of Authorization No. N-1837 Expires 8/19/89

Date 2/6/89 Name Masoneilan-Dresser Industries Signed John Kern
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Ma. and employed by H.S.B.I. & I. Co.

of Hartford, Ct. have inspected these items described in this Data Report on 08 February 1989, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 02-08-89 Signed W. H. Evans Commissions MA-001222/PA-WK-2514
(Authorized Inspector) (if Nat. Bd. (incl. endors. agents) state or prov. and no.)

DATE 10/3/97
CLEAR PUMPS OR VALVES.

4. Pump or Valve Globe Valve Nominal Inlet Size 2" / Outlet Size 2"
(inch) (inch)

(1)	438-40211	N-00168-3-6	N/A	A6878	2	N/A	1977
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. P.O. 628V-651 Water 220G-P0W102X2
(Enter description of service for which equipment was designed)

6. Design Conditions 720 psi 560 °F or Valve Pressure Class N/A (1)

7. Cold Working Pressure 2160 psi at 100°F.

3. Pressure Retaining Pieces

[illegible]

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

(1377)

This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

[illegible]

9. Hydrochloric test 3250 ✓ pol.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1971.

Addenda SUMMER 1973, Code Case No. N/A, Date N/A

Signed Masonell International, Inc. by [Signature] 1/13/78

Our ASME Certificate of Authorization No. N-1836 to use the N symbol expires 8/19/80
(Manufacturer) (N) (NPV) (Date)

CERTIFICATION OF DESIGN

Design information on file at Macneil International, Inc.

Screen analysis report (Class 1 only) on file at N/A

Design specifications certified by (1) Carl O. Richardson

PE State PA Reg. No. 16297-E

Stress analysis certified by (1) N/A

PE State N/A Reg. No. N/A

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Mass. and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected the pump or valve described in this Data Report on

of Hartford, CT have inspected the pump, or valve, described in this Data Report on 1-13 1978 and state that to the best of my knowledge and belief, the Manufacturer has constructed this pump, or valve, in accordance with the ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2/1-13 1978
from the
 (Inspector)
 Commission: MA946 Per. Wc1087
 (Part Cd. Spec. Prov. and No.)

Form No. 1954

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/30/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200165607
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By FENOC Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date “

4. Identification of System Diesel Fuel Oil System (Class 3)

5. (a) Applicable Construction Code ASME III 1974 Edition, — Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Fuel Oil Storage Tank	Nat'l Annealing Box	6470	2214	2EGF-TK21B	1978	Corrected	Yes
Studs	Nova Machine	N/A	N/A	K339	2004	Installed	No
Nuts	Nova Machine	N/A	N/A	A201	2004	Installed	No

7. Description of Work Replaced manway cover studs and nuts

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No previous NIS-2 Data Report. Code Data Report attached.

Applicable Manufacturer's Data Reports to be attached

1 1/4"-8 Studs PO # 47030430 1 1/4"-8 Nuts PO # 47030430

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 4, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-7-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions PA9428 ANIB PA0284
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-7-, 20 06

1. Manufactured by National Annealing Box Co., Washington, PA
(Name and address of Manufacturer)

2. Manufactured for Duquesne Light Co., Beaver Valley Unit 2, Shippingport, PA
(Name and address of Purchaser)

3. Type Horiz. Vessel No. (6470) (-) Nail. Bd. No. 2214 Year Built 1978
(Horiz. or Vert.) (Mfrs. Serial) (State & State No.)

3a. Applicable ASME Code: Section III, Edition 1974 Addenda date - Case No. - Class 3
SA516

4. Shell: Material Gr. 70 T.S. 70000 Min. (b) Material SA516 Gr. 70 T.S. 70,000 Min.
(Kind & Spec. No.) (Min. of range specified) Nom. Thk. 5/16 Cor. Allow 1/16 Dia. 11 Ft. 11-3/8 In. Length 72 Ft. 1-7/16 In.

5. Seams: Long Dbl. Butt H.T. No R.T. Spot Efficiency 85 %

Girth Dbl. Butt H.T. No R.T. Spot No. of Courses 7
6. Heads: (a) Material SA516 Gr. 70 T.S. 70000 Min. (b) Material SA516 Gr. 70 T.S. 70,000 Min.

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
---------------------------------	-----------	-----------------	-------------------	---------------------	-----------------------	-------------------------	------------------	---

(a) Ends	.4034" Min.	144"	8-3/4"	-	-	-	-	Concave
----------	-------------	------	--------	---	---	---	---	---------

(b)	O.D.							
-----	------	--	--	--	--	--	--	--

If removable, bolts used None Other fastening Drop Weight (Describe or Attach Sketch)
(Material, Spec. No., T.S., Size, Number)

Charpy impact - ft-lb None Test
Hydrostatic None

7. Design Pressure 40 psi at max. temp. 50 °F. at temp. of - °F. Press 60 psi.

8. Safety or Relief Valve Outlets: Number - Size - Location External to vessel

9. Nozzles:
Purpose (Inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached
See Sheet 2 of 2 for nozzle information.

10. Inspection Manholes, No. 1 Size 24" Location Shell at top.

Openings: Handholes, No. - Size - Location -

Threaded, No. - Size - Location -

11. Supports: Skirt - Lugs - Legs - Other See Remarks Attached
(Yes or No) (Number) (Number) (Describe) (Where & How)

12. Remarks: Purpose of Vessel - Storage of Fuel oil for Emergency Diesel Generator operation.
Vessel MK. 2EGF-TX 21B. Stone & Webster P.O. 2BV-54.

This vessel will be supported by pouring concrete around vessel underground installation.

(this is Page 1 of 2) (Brief description of purpose of the vessel-State Contents.)

If Postweld Heat-Treated.

List other internal or external pressure with coincident temperature when applicable.

We certify that the statements made in this report are correct and that this nuclear vessel conforms to the rules of construction of the ASME Code, Section III.

Date 5/9 1978 Signed National Annealing Box Co. By J.R. Jentz
(Manufacturer) (S. Manager)

Certificate of Authorization Expire August 4, 1978 Certificate of Authorization No. 1177

CERTIFICATION OF DESIGN

Design information on file at National Annealing Box Co., Washington, PA
Stress analysis report on file at National Annealing Box Co., Washington, PA
Design specifications certified by Richard P. Anderson Prof. Eng. State PA Reg. No. 21602-E
Stress analysis report certified by N/A Prof. Eng. State - Reg. No. -

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY National Annealing Box Company at Washington, PA
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Pennsylvania and employed by Hartford Steam Boiler & Cold Hartford, Connecticut

have inspected the pressure vessel described in this Manufacturer's Data Report on 6-7-1978, and state that to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with the ASME Code Section III.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6-7-1978 Commissions NB 42024
Inspector's Signature [Signature] National Board, State, Province and No.

Manufactured by - National Annealing Box Company, Washington, PA

Manufactured for - Duquesne Light Co., Beaver Valley Unit 2, Shippingport, PA

Type - Horiz. Vessel 6470 Natl.Bd. #2214 Yr. Built - 1978

Applicable ASME Code: Section III, Edition - 1974, Class - 3.

Nozzles:

Purpose

(Inlet, Outlet,
Drain)

	Number	Dia. or Size	Type	Material	Tk.	Reinforcement Material	How Attached
Pump Recirc.	2	3/4"	Butt Wld	SA106Gr.B	Sch.160	Integral	Welded
Return	1	1"	Butt Wld	SA106Gr.B	Sch.80	Integral	Welded
Fill	1	2"	Butt Wld	SA106Gr.B	Sch.80	Integral	Welded
Suction	1	3"	Butt Wld	SA106Gr.B	Sch.80	SA516 Gr.70	Welded
Level Instr. & Vent	2	4"	Butt Wld	SA106Gr.B	Sch.80	SA516 Gr.70	Welded
Pump	2	14"	Butt Wld	SA106Gr.B	Sch.80	SA516 Gr.70	Welded

0653

Form No. 1955

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11-04-06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200165646
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Reactor Coolant (Class 1)
5. (a) Applicable Construction Code Section III 1977 Edition, S'79 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Power Relief Valve	Garrett Pneumatic	P-119	N/A	2RCS-PCV456	1983	Corrected	Yes
Plug	Anderson Greenwood Crosby	N96012-76-0151	N/A	N/A	2004	Installed	Yes

7. Description of Work Replaced valve plug assembly.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Previous NIS-2 Data Report Nos: 1660, 1441, 1195, 1042,
539, 360, and 010.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date November 30, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions IB, NI, PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-1-, 20 06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

As required by the Provisions of the ASME Code, Section III, Division 1 - Not to Exceed One Day's Production

1. Manufactured and certified by Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093
(Name and Address of N Certificate Holder)

2. Manufactured for FIRST ENERGY CORP.
(Name and Address of Purchaser or Owner)

3. Location of Installation BEAVER VALLEY POWER STATION
(Name and Address)

4. Type DS-C-67970-13REV.J ASME SA479 TYPE316 75,000 -- 2004
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 1977 SUMMER 1979 1 --
(edition) (addenda date) (class) (Code Case No.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) -- Revision -- Date --
(no.)

7. Remarks

8. Nom. thickness (in.) -- Min. design thickness (in.) -- Dia. ID (ft & in.) -- Length overall (ft & in.) --

9. When applicable, Certificate Holders' data reports are attached for each item of this report.

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) N96012-75-0148	---	(26)	
(2) N96012-76-0151	---	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure -- psi. Temp. -- ° F Hydro. test pressure 6125 at temp. 70 ° F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

Certificate Holder's Serial No. N96012-75-0148 & 76-0151**CERTIFICATE OF DESIGN**Design specifications certified by LIKE EZEKIOYE P.E. State PA Reg. no. 18379-E
(when applicable)Design report* certified by W. D. GREENLAW P.E. State MA Reg. no. 14784
(when applicable)**CERTIFICATE OF COMPLIANCE**We certify that the statements made in this report are correct and that this (these) Plugs
conforms to the rules of construction of the ASME Code, Section III, Division 1.NPT Certificate of Authorization No. N-1877 Expires Sep. 30, 2004
Anderson Greenwood CrosbyDate 17-JUN-04 Signed Wrentham, MA by D. E. Tuma
(NPT Certificate Holder) (Authorized Representative)**CERTIFICATE OF INSPECTION**I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and
the State or Province of Texas and employed by ABS Group Inc.
of Houston, Texas have inspected these items described in this Data Report on6-17-20 04 and state that to the best of my knowledge and belief, the Certificate Holder
has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has
been authorized for stamping on the date shown above.By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning
the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any
manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.Date 6-17-20 04Signed Joel Locker
(Authorized Inspector)Commissions Tex. 1060
(Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Form No. 1964

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/10/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200154335
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS-Valve Team Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Quench Spray (Class 2)

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Walworth	A1105	1214	2QSS-1	1979	Corrected	Yes
Plug	Crane Nuclear	N/A	N/A	Ht. #XDT	2006	Installed	No

7. Description of Work Replaced valve stem leak off plug.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 22, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB9428 A-1 B PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-22-, 20 06

As Required by the Provisions of the ASME Code, Section III, Div. 1

(a) Model No.	(b) N Certificate Holder's	(c) Canadian		(d) Drawing	(f) Nat'l.	(g) Year
Serial	Registration	No.		No.	Bd. No.	Built
Sense No. or Type	No.	No.			(e) Class	

Y226	CCOSP	A1105	D-50946	2	1214	1979
------	-------	-------	---------	---	------	------

Borated water service

(Brief description of service for which equipment was designed)

pn Conditions _____ psi _____ °F or Valve Pressure Class 150# (1)

Working Pressure 275 psi at 100°F.

are Retaining Pieces

[illegible]

Mark No.	Material Spec. No.	Manufacturer	Remarks Heat #
Boeing			
Studs	SA-193, GrB8	B & G	8644067
Nuts	SA-194, Gr 8	B & G	A9368
Other Parts			
Pipe Plug	SA-182, TPF 304	A.B. Murray/ Camco	MU

Hydraulic test 425 psi. Disk Differential test pressure 275 psi.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. I, Edition 1971
 made Winter 1972 (Date), Code Case No. 1672 Date Oct 30, 1978
 at Walworth Company/Aloyco Plant by Frank Truppo Manager
 (In Certificate Holder's Name) Q-A
 ASME Certificate of Authorization No. N-2076 to use the N symbol expires 4-7-81
 (Date)

CERTIFICATION OF DESIGN

Design information on file at Walworth Company/Aloyco Plant
 Stress analysis report (Class 1 only) on file at Not required
 Design specifications certified by (1) Fayek A. Gopalani
 (2) State PA Reg. No. 21966-E
 Stress analysis certified by (1) Not required
 (2) State _____ Reg. No. _____
 (3) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New Jersey and employed by HSBI&I Co.
 at Hartford, Conn. have inspected the pump, or valve, described in this Data Report on
Oct. 30, 1979 and state that to the best of my knowledge and belief, the N Certificate Holder has con-
 structed this pump, or valve, in accordance with the ASME Code, Section III.
 In giving this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning
 the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any
 manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Oct. 30, 1979 Commissions NB-7425

Form No. 1972

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/19/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200232622
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS Construction Service Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Reactor Coolant (Class 1)
5. (a) Applicable Construction Code Section III 1971 Edition, W'72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N-416-2

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Globe Valve	Kerotest	PS5-5	N/A	2RCS-50	1977	Removed	Yes
Pipe Support	FENOC	N/A	N/A	2RCS-PSA960	2006	Installed	No

7. Description of Work Eliminated/removed valve and installed pipe and couplings. Capped pipe
downstream. Installed new non-integral support.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report Nos: 1329 and 1199. Original Code Data Report attached to
Applicable Manufacturer's Data Reports to be attached
1329. New 1-1/2" Pipe: P.O. 45210398 / Ht. #505894; Couplings: P.O. 45210398 / Ht. #60958;
Caps: P.O. 7121575 / Ht. #60958.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date January 12, 20 07
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N PA2384
 Inspector's Signature National Board, State, Province, and Endorsements

Date 1-15-, 20 07

Form No. 1973

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/19/06
(NAME)
76 South Main Street - Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order Nos: 200232789, 200167097
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By Westinghouse/PCI Type Code Symbol Stamp N/A
(NAME)
Lake Bluff, IL 60044 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Reactor Coolant (Class 1)

5. (a) Applicable Construction Code Section III 1971 Edition, S'72 Addenda, 1401-1, 1459-1 Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Reactor Vessel Head	Combustion Engineering	CE-9071	21669	2RCS-REV21	1975	Corrected	Yes

7. Description of Work Performed an embedded flaw overlay repair on the J-weld and Tube OD (below the weld) with Alloy 52 on penetration nos. 16, 56, and 61.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Previous NIS-2 Data Report No. 1656. Original Data Report attached to 1656. Weld
Applicable Manufacturer's Data Reports to be attached
overlay was performed per Relief Request BV3-RV-04. Work was performed by Westinghouse/PCI
under the BVPS FENOC QA and ASME XI programs.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [Signature] Senior Specialist Date December 20, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB 9428 ANIB PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-20-, 20 06

Form No. 1974

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 10/26/06
(NAME)
76 South Main Street - Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order #200232912
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS-Construction Service Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Reactor Coolant (Class 1)

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N-416-2

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Kerotest	JU1-17	6460	2RCS-635	1975	Removed	Yes
Pipe	Energy & Process	N/A	N/A	Ht. #553070	2006	Installed	No
Coupling	Energy & Process	N/A	N/A	HT# 239384	2006	Installed	No

7. Description of Work Removed existing valve out and installed pipe spool, replaced flange bolting.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks No-Code Data Reports available. Previous NIS-2 Data Report: 1652.

Applicable Manufacturer's Data Reports to be attached

Pipe PO# 45185546, coupling PO# 45210302, 7/8"-9 studs PO# 104366-207 Ht. #RRW, and7/8"-9 nuts PO# 45189502 Ht. #185C.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed

Senior Specialist

Date

December 18, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-22-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature

Commissions

NB9428A51B PA2384
National Board, State, Province, and EndorsementsDate 12-18-, 20 06

Form No. 1976

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner First Energy Nuclear Operating Company Date 10/23/06
(NAME)
76 South Main Street - Akron OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 2
(NAME)
Route 168 - Shippingport, PA 15077 Westinghouse P.O.# 7024829
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS/Site Projects Type Code Symbol Stamp N/A
(NAME)
Route 168 - Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor coolant
5. (a) Applicable Construction Code ASME Section III 19 71 Edition, S72 Addenda, See N-1 Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs/Replacement Activity: 1989 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Steam Generator	Westinghouse	DMGT-1961	W-16598	2RCS-SG21A	1977	Corrected	Yes

7. Description of Work Installed 16 Inconel 690 plugs (8 tubes). Installed stabilizers in 6 of those tube locations. Installed new gaskets on the primary manways & secondary side inspection ports

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure N/A psi Test Temp. N/A °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Primary side order 200151414, secondary side order 200151415.

Applicable Manufacturer's Data Reports to be attached

Performed a VT-1 examination on all studs, nuts, washers, insert plates & gasket seating surfaces.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Gary Alberti, SG Project Manager Gary Alberti Date 10/23/ 2006
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-22-05 to 11-8-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Ignish Commissions NB9428 ANIB PA2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-8- 2006

Form No. 1977

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner First Energy Nuclear Operating Company Date 10/23/06
(NAME)
76 South Main Street - Akron OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 2
(NAME)
Route 168 - Shippingport, PA 15077 Westinghouse P.O.# 7024829
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS/Site Projects Type Code Symbol Stamp N/A
(NAME)
Route 168 - Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor coolant
5. (a) Applicable Construction Code ASME Section III 19 71 Edition, S72 Addenda, See N-1 Code Case
 (d) Applicable Edition of Section XI Utilized for Repairs/Replacement Activity: 1989 Edition, No Addenda
 (e) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Steam Generator	Westinghouse	DMGT-1962	W-16599	2RCS-SG21B	1977	Corrected	Yes

7. Description of Work Installed 16 Inconel 690 plugs (8 tubes). Installed stabilizers in 3 of those tube locations. Installed new gaskets on the primary manways, secondary manways & inspection ports.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure N/A psi Test Temp. N/A °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Primary side order 200151417, secondary side order 200151418. Removed 1 cold leg plug,
replaced with sentinel plug. Performed a VT-1 examination on all studs, nuts, washers, insert plates
& gasket seating surfaces. Performed a VT inspection of the steam drum region & feedwater header.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Gary Alberti, SG Project Manager Gary Alberti Date 10/23/ 2006
 Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of

Hartford, CT have inspected the components described in this
 Owner's Report during the period 4-27-05 to 11-8-06, and state that to the
 best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this
 Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zignale Commissions NB9428 ANIB PA2384
 Inspector's Signature National Board, State, Province, and Endorsements

Date 11-8-, 2006

Form No. 1978

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner First Energy Nuclear Operating Company Date 10/23/06
(NAME)
76 South Main Street - Akron OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station Unit No. 2
(NAME)
Route 168 - Shippingport, PA 15077 Westinghouse P.O.# 7024829
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS/Site Projects Type Code Symbol Stamp N/A
(NAME)
Route 168 - Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date N/A
4. Identification of System Reactor coolant
5. (a) Applicable Construction Code ASME Section III 19 71 Edition, S72 Addenda, See N-1 Code Case
 (f) Applicable Edition of Section XI Utilized for Repairs/Replacement Activity: 1989 Edition, No Addenda
 (g) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Steam Generator	Westinghouse	DMGT-1963	W-16600	2RCS-SG21C	1977	Corrected	Yes

7. Description of Work Installed 18 Inconel 690 plugs (9 tubes). Installed stabilizers in 7 of those tube locations. Installed new gaskets on the primary manways, secondary manways & inspection ports

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☒ Exempt ☐
 Other ☐ Pressure N/A psi Test Temp. N/A °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Primary side order 200151419, secondary side order 200151420.

Applicable Manufacturer's Data Reports to be attached

Performed a VT-1 examination on all studs, nuts, washers, insert plates & gasket seating surfaces.Performed a visual inspection of the steam drum region & feedwater header.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Gary Alberti, SG Project Manager Gary Alberti Date 10/23/ 2006
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PA and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-8-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zyink Commissions NB9428 ANIB PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-8-, 2006

Form No. 1979

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 11/10/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 2
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 Work Order 200235524
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.
3. Work Performed By BVPS-Maintenance Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "
4. Identification of System Main Steam (Class 2)
5. (a) Applicable Construction Code Section III 1977 Edition, S'79 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989
 (c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Atwood & Morrill	3-15579-03	N/A	2MSS-AOV101C	1987	Corrected	Yes
Pilot Poppet	Weir Valve	1	N/A	Ht. #73130	2003	Installed	Yes

7. Description of Work Replaced Pilot Poppet/stem assembly and one body/bonnet nut.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☒
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks Code Data Report attached. Previous NIS-2 Data Report No. 1648. Replacement 2-1/4"

Applicable Manufacturer's Data Reports to be attached

Nut: P.O. 7122791, Ht. #V127.

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned [Signature] Senior Specialist Date November 21, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions I, N, PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-22-, 20 06

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***

**As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production**

Pg. 1 of 2

1. Manufactured and certified by Weir Valves & Controls USA, Inc. 285 Canal Street Salem, MA 01970
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy, P.O. Box 6100, Johnstown, PA 15907-6100
(name and address of Purchaser)
3. Location of installation Beaver Valley Nuclear Power Plant, Route 16B, Shippingport PA 15077
(name and address)
4. Type: *32446-303-C Rev. 02 SA 479, S30400 88100 PSI N/A 2003
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRM) (year built)
5. ASME Code, Section III, Division 1: 1977 S'1979 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A N/A N/A Date N/A
(no.)
7. Remarks: Cust. Item 04 WVC Item 40-3 Qty. 1 Pilot Poppet A&M P/N 32446-303-4226-000_QLA
(WVC S.O. 68311) *Dwg. Prepared by WVC. This certification meets required information of
ASME Section III 1977 Edition S'1979 Addenda.
8. Nom. Thickness (in.) 1.986 Min. design thickness (in.) 1.75 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) <u>HT: 73130 S/N: 1</u>	<u>N/A</u>	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure N/A At temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Reprint (7/91)

FORM N-2 (Back - Pg. 2 of 2)

Certificate Holders' Serial Nos. HT:73130 S/N 1 through N/A

CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. no. N/A
(when applicable)

Design report * certified by N/A P.E. State N/A Reg. no. N/A
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these)
conforms to the rules of construction of the ASME Code, Section III, Division 1.

Pilot Poppet

NPT Certificate of Authorization No. N2607 Expires 6-13-04

Date 9/19/03 Name Weir Valves & Controls USA, Inc. Signed Brian D. Sullivan
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of

MA.

And employed by

HSBCT

of Hartford, CT have inspected these items described in this Data Report on 9/19/03 and state that to the
Best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or
loss of any kind arising from or connected with this inspection.

Date 9/19/03 Signed [Signature] Commissions A.N. MA1657
(authorized inspector) (N.B. incl. endorsements and state or prov. and no.)

Form No. 1994

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169557
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Chemical and Volume Control

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E
 (c) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Lisega	61211/20	N/A	2CHS-PSSP006	---	Replaced	No
Snubber	Lisega	61195/130	N/A	2CHS-PSSP006	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Robert B. Brooks Date Dec 11, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zynik Commissions I, N, PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-11, 20 06

Form No. 1995

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169558
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date “

4. Identification of System Chemical and Volume Control

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case

(d) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E

(e) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Lisega	61211/07	N/A	2CHS-PSSP015X	---	Replaced	No
Snubber	Lisega	61211/20	N/A	2CHS-PSSP015X	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Robert B. Brooker Date Dec. 11, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zink Commissions I, N, PA 2384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-11-, 20 06

Form No. 1996

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169571
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Safety Injection

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case

(f) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E

(g) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Basic-PSA	24340	N/A	2SIS-PSSP208X	---	Replaced	No
Snubber	Basic-PSA	24934	N/A	2SIS-PSSP208X	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed

Robert B. Brooks
Owner or Owner's Designee, Title

Date Dec 11, 20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT

have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zivick
Inspector's Signature

Commissions

I, N, PA2384
National Board, State, Province, and Endorsements

Date 12-11-, 20 06

Form No. 1997

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169572
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Safety Injection

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case

(h) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E

(i) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Basic-PSA	24110	N/A	2SIS-PSSP209A	---	Replaced	No
Snubber	Basic-PSA	24337	N/A	2SIS-PSSP209A	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed

Robert S. Brooks
Owner or Owner's Designee, Title

Date

Dec 11, 20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zyrick
Inspector's Signature

Commissions

I, N, P 42384
National Board, State, Province, and Endorsements

Date

12-11-

, 20

06

Form No. 1998

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169565
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Main Steam

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case

(j) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E

(k) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Basic-PSA	16967	N/A	2MSS-PSSP151A	---	Replaced	No
Snubber	Basic-PSA	3710	N/A	2MSS-PSSP151A	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/ASigned Robert B. Brooks Date Dec. 11, 20 06

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zylich
Inspector's Signature

Commissions

I, N, P 2384
National Board, State, Province, and EndorsementsDate 12-11-, 20 06

Form No. 1999

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169550
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Reactor Coolant

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case
 (l) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E
 (m) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Basic-PSA	16839	N/A	2RCS-PSSP015X	---	Replaced	No
Snubber	Basic-PSA	3702	N/A	2RCS-PSSP015X	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.Applicable Manufacturer's Data Reports to be attachedSnubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/A

Signed

Robert B. Brooks

Date

Dec. 11, 20 06Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. ZinkInspector's Signature

Commissions

I.N.I. P-2384National Board, State, Province, and Endorsements

Date

12-11-, 20 06

Form No. 2000

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169568
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Residual Heat Removal

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case

(n) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E

(o) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Basic-PSA	3686	N/A	2RHS-PSSP522X	---	Replaced	No
Snubber	Basic-PSA	3688	N/A	2RHS-PSSP522X	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed

Robert B. Brooks
Owner or Owner's Designee, Title

Date

Dec. 11, 20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of

Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Rywik
Inspector's Signature

Commissions

I, N, P 2384
National Board, State, Province, and Endorsements

Date

12-11-, 20 06

Form No. 2001

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169579
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Main Steam

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case

(p) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E

(q) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Basic-PSA	3702	N/A	2MSS-PSSP001	---	Replaced	No
Snubber	Basic-PSA	17210	N/A	2MSS-PSSP001	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed

Robert B. Brooker
Owner or Owner's Designee, Title

Date

Dec. 11, 20 06

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT

have inspected the components described in this Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Hyatt
Inspector's Signature

Commissions

I, N, PA 2384
National Board, State, Province, and Endorsements

Date

12-11-, 20 06

Form No. 2002

FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner F.E.N.O.C Date 12/11/06
(NAME)
76 South Main Street – Akron, OH 44308 Sheet 1 of 1
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS) Unit No. 2
(NAME)
Shippingport, PA 15077 200169581
(ADDRESS) Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS – Nuclear Construction Type Code Symbol Stamp N/A
(NAME)
Shippingport, PA 15077 Authorization No. N/A
(ADDRESS) Expiration Date "

4. Identification of System Main Steam

5. (a) Applicable Construction Code Section III 1971 Edition, W72 Addenda, N/A Code Case

(r) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1989E

(s) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Basic-PSA	3710	N/A	2MSS-PSSP131B	---	Replaced	No
Snubber	Basic-PSA	16967	N/A	2MSS-PSSP131B	---	Replacement	No

7. Description of Work Replaced snubber with spare for testing/refurbishment purposes.

8. Tests Conducted: Hydrostatic* ☐ Pneumatic* ☐ Nominal Operating Pressure ☐ Exempt ☐
 Other ☐ Pressure psi Test Temp. °F

*Record test pressure and temperature

FORM NIS-2 (Back)

9. Remarks The snubber was replaced with a used spare. No Code Data Reports are available.

Applicable Manufacturer's Data Reports to be attached

Snubbers are considered non-NF components (non-code).

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed Robert B. Brooker Date Dec. 11, 20 06
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB CT of Hartford, CT have inspected the components described in this

Owner's Report during the period 4-27-05 to 11-11-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Ignat Commissions I, N, P42384
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-11-, 20 06